The Builder.

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*Wilkinson on Colour and Taste.**

HAT Sir J. Gardner Wilkinson has produced a work which deserves to be well studied admits of no dispute. His remarks on general taste we are able almost wholly to coincide with; and those on colour include much that we must approve, as doing away with half-formed theories prominently advanced, but which have never been understood, nor, as it seems to us, ever acted upon by their authors. We can the more readily come to a decision on the merits of one portion of the book, as the bulk thereof appeared, with the cuts, in our volume for the year 1854. Long prior to Sir Gardner Wilkinson's contribution, we had devoted space to the argument for structural truth in works of combined decorative art and utility, and had shown that the impression of the beautiful, however necessary to be universally catered for, really could not be given unless the use of the object were also fully attained and made apparent. At that time the Department of Art had not been established, and very different principles were being acted upon by those who are now the most valuable auxiliaries in the right work of improvement. We had had indeed no difficulty in forming our views: they are such as arise from study of principles, recognized by the very nature of architecture, and common to all arts related to it, and, therefore, essential to modern development from any assumed basis or groundwork of style. The principles, after having been departed from under the degenerate reign of taste which succeeded the best periods of architecture in Italy and decorative art in France, as during the reign of George III. were again indoctrinated by a new revival—that of Mediæval architecture—and notably in England by the "True Principles," and the designs of Welby Pugin, whose works in the Exhibition of 1851, in contrast to the non-structural and the naturalistic works with which they were surrounded, showed how the decorative purpose, including variety of feature, might be united, even with rigid adherence to a very small number of simple structural forms. To Welby Pugin present expression of sound views on architecture and decorative art must be held, in some measure, traceable; and the debt should be admitted more frequently than it is. What Pugin found in one family of styles, and sought to apply in a particular manner, would now be considered as of very general application.

With regard to our author's observations on "Dressed or Geometrical Gardens," forming Part III. of the work, and extending only to twenty-eight pages, it may be sufficient to say that the main argument accords with our own, as put forth lately in certain articles in which we endeavoured to show that the London parks, squares, and gardens, would be greatly benefited by the introduction of terraces and steps and other architectural features, as would buildings generally by a spreading base and foreground formed of natural objects combined with architecture and sculpture, after the practice of the architects of the Italian and Elizabethan schools. But Sir Gardner Wilkinson has added to the value to the public of this portion of his work, by many excellent remarks, and plans of sunk gardens with terraces, and by a list of plants of different colours, showing when each would be in flower.

The drawback to the merit of the work is the peculiarity of its arrangement. The pages comprise three unequal parts, without other division except that of numbered paragraphs; and as there is no table of contents, and the part on colour comes first (Part II. "On the Necessity of a Diffusion of Taste among all Classes," going into the subject of principles of decorative art, as we have mentioned, and being extended so as to form the largest portion of the book, by addition of historical inquiries connected with architecture, painting, and sculpture), we apprehend the author's reasoning may be not so clear to the student as it would otherwise be; though we should say, there is a good index, and care is taken in the text to direct the reader by cross references.

Choosing to look, first, at the second part of the work, we find our author demonstrating, as in our columns, that taste, to be of use, must pervade all classes; that it is one of the greatest errors to suppose that wealth alone can obtain objects of good taste; and that the public mainly are in fault—good designs not being appreciated. He goes on to show how the Greeks excelled in art—regarding no object as too mean; and he contrasts their works, as the vases, with the modern furniture compounded of parts having no proper relation to one another; whilst he dwells on the importance of drawing and the study of proportion, and of rules—the latter as necessary, though there should be no *dependance* upon them. He perceives, with Mr. Wornum and others, that actual copies of natural objects in works of decorative and utilitarian art, are in general opposed to the very principle of nature; that perspective, as in the attempts at landscape in bas-relief; pictures in positions unsuitable as to viewing them; false pretences in place of forms designed specially for the use, and many other practices which have become frequent, have nothing in common with good art. He considers the question of monuments,—columns, obelisks, and colossal sculpture,—to the modern use of all of which he sees objections. The forms and decoration of vases are treated of by him at some length; but a certain inaccuracy in the drawing of one or two of the illustrations,—for example, in the vase which is repeated on the cover of the volume,—is to be regretted. In speaking of the decoration of walls, after contending that churches are unsuitable places for pictures, he enters at some length into the question of painted sculpture, deciding by the evidence that the practice was adopted by the Greeks, though not in all works, whilst he does not recommend it for modern adoption. He next reminds the reader, in what is not the least interesting portion of his book, how one style arose from another, and that the pointed arch was commonly used by the Arabs as early as the ninth century—if, indeed, it be not discoverable centuries earlier in date, and even in the works of the Assyrians; how the best-known Greek *ornament* was in fact Egyptian; how in great probability much was due to the Sidonians or Phœnicians; and how the early Christian art was indebted to Pagan models. He follows the history of mosaic work as further illustration of the manner in which so many arts have been indebted to one another for development; notices the rise of painting and decay of art; disputes the notion that Protestantism is incompatible with high art, and speaks of the undue importance attached to landscape and scenes from common life. In regard to architecture, he advocates the claims of the Elizabethan style for country houses, and of the Italian for towns, but avoiding the use of the parapet and of the low-pitched roof.

Sir J. Gardner Wilkinson considers, whilst both the Italians and the French are far more successful than ourselves in decorative design, the Germans have not the superiority they assume to have, especially in regard to colour. As to the English, he regards any distaste for bright colours as in great part accidental. Some persons, it is true, may be as much insensible to harmony of colour as many are to harmony of sound: others have a perverted or false taste; and others are unable to distinguish colours—being affected by "colour-blindness." Perception of the harmony of colours is a natural gift: theory will not supply it. He complains that—

> "Because such and such colours stand in a certain relationship to others, or are compounded in a particular manner, it is affirmed that they must *therefore* accord or disagree with some other one; and the question asked is, not whether they *do* or *do not* agree, but whether they *ought* or *ought not* to agree."

To begin with theory is contrary to all inductive reasoning. We have first to deal with facts, and their results; and—

> "* * * though the three primaries, blue, red, and yellow, in certain proportions, constitute white light, all inquiries respecting the proper quantities required for it, and every appeal to philosophical experiments, in seeking the proper method of *ornamenting* with colour, are quite irrelevant; and the Arabs attained to the great perfection we admire, in the Alhambra and elsewhere, without theories."

Our author thus rejects the idea that as the colours in white light, as it is said, "neutralize" each other, they should *therefore* be so employed for decorative purposes. He says, most properly, that if the colours really did *neutralize* each other, "they would then be deprived of their real effect," so that we should counteract the very object in view. "To ornament with colour and *neutralize* the colour is a contradiction." The accordance of the three primaries in juxta-position is another matter; but "it has been found necessary to employ artificial means to obtain any approach" (and that, our author says, a very *imperfect* one) to the white light they compose. Colours in ornamentation are never whirled round before the eye: so far from desiring to give the impression of white or of colourless light, our object is the reverse,—"we want to *ornament* with colours, not to *deceive* with colours, nor to place them so that they may disappear or be confounded." One theory our author describes as that any primitive colour may be *destroyed* by its opposite derivative or accidental colour, or we should say its complimentary, as red by green, and blue by orange. But the effects of red on green, and of blue on orange, he says, "are totally different; and if the two former diminish each other's intensity, the latter mutually increase theirs, being contrasts, and each giving to its companion its full power." Another theory supposes that the decoration of a room should be the counterpart of nature: if so, it may be asked, what phase of nature should be followed; and would the Arabs of the desert be condemned to give up the lively carpets they weave, and confine themselves almost wholly to blue (of the sky) and an ochry yellow (of the sand); whilst, excepting blue, the primaries would be sparingly used in many countries. And when green "is *actually copied*" we do not welcome that abundance which it is a pleasure to behold in the fields. Nature, however, "has not taught us to abstain from using brilliant colours in those objects which are nearest to our sight." Also (Sir Gardner Wilkinson adverts to another theory) "when some one tells us that in the interior of buildings the stone should retain its 'natural' hue, he seems to forget that a building is not a work of *nature*, but of *art*."

In the last of these theories we may, however, say there is a certain element of truth which should not be disregarded. What our author says may be quite correct: it is not sufficient that a material should exhibit its natural appearance; the particular detail must be good chromatically, or in the effect of the whole interior or building. Nevertheless, it is objectionable to offend against structural truth; and therefore unless we can attain the chromatic object, preserving *consistency* with the real character of the material, we must modify our

* "On Colour, and on the Necessity of a general Diffusion of Taste among all Classes; with Remarks on laying out dressed or geometrical Gardens: Examples of good and bad Taste, illustrated by woodcuts and coloured plates in contrast." By Sir J. GARDNER WILKINSON, D.C.L. F.R.S. F.R.G.S. M.R.S.L. M.R.I.B.A. &c. 8vo. pp. xvi. 408; 8 plates, 62 cuts. London, John Murray, 1858.

scheme of colour or build with a different material,—that is to say, if the best art as intended is to be attained. Questions of the like character, to be solved in the course of architectural design, involve the whole difficulty of it; and the ordinary failures arise from leaving one or other of the considerations out of recollection. This requirement of meeting a certain contrariety of objects, and of working with a multitude of agents varying from one another in their physical character and at every fresh conjunction, is, in short, the difficulty of colour.

"The first step in studying the harmony of colours, is certainly to ascertain what two, or more, when placed together, are concords or discords. But this is not all that has to be determined. The quantity of each must also be regulated, as well as their proper position; and the same set of colours, put together in different proportions and positions, will have a different appearance. Colours also borrow from each other, and thus mutually change their effect; while others heighten each other's power by contrast; and others soften, or diminish it." * * * "Blue and orange, which are accidental colours, are a harmonious contrast; but red and green, or yellow and purple, are not *necessarily so because* they are also accidental colours. (See Sec. vi.) We must, therefore, understand which colours agree by contrast, which by analogy, and which tend to diminish or otherwise alter each other's effect; for some of these are apt to be confounded, and a very fallacious doctrine has been propounded—that the union of one of the primaries with its accidental colour is analagous in effect to that of the same primary with its two companions; as, for instance, that red with green has the same effect as red with blue and yellow."

He again observes that it is not enough to know that *theoretically* all the colours are present in such a case as that last mentioned: the green is not only to the eye a new colour, but it has a different effect in combination with other colours from that produced by blue and yellow. It is true that red and blue in juxtaposition have the appearance of purple; and the latter with green would be discordant—though, were a yellow hue placed between the blue and the red, the purple would not be produced, and there would be harmony of effect. Yellow next to red, also, gives it an orange hue; but similar illusion is not caused by the contact of blue and yellow.

"It is not, therefore, necessary to lay down the same general and *invariable* rule respecting the three primaries;—that 'in making new patterns or ornaments, red and blue should not join, nor yellow and red, nor yellow and blue,' as though the three combinations were exactly similar and subject to the same laws."

The differences between a *neutralising* or *balancing* effect, harmony by contrast, and other harmonious unions of colours, he says, are sufficiently obvious; and that,—

"* * * nothing shows them better than the juxtaposition of such colours as black and red, or black and green, which really do *neutralise* each other, or lessen each other's effect; and that of black and white, which *contrast* with and set off each other; and that of blue, red, and yellow, which *harmonise* with, and set off, but *do not neutralise*, each other."

In the course of a classification of the colours, he gives a valuable table of the English names of about one hundred colours and hues, with their nearest equivalents in several other languages, and thus shows the indefiniteness of every attempt at the description and nomenclature. This, we may say, has arisen from the difficulty of finding, unless in the spectrum, any existence of the central colour—the chief colours in flowers and dyed materials being so many hues,—like the scarlet and the orange, or the crimson and the pink, beside the red. The terms for the variations in colour and intensity, as "hue," "tint," "shade," and "tone," appear to be understood by Sir Gardner Wilkinson, as we are accustomed to use them. Upon the proper definition and comprehension of *harmony*, much, if not the whole of the subject, depends. Harmony of colour is not merely *similarity*; but there is also harmony by contrast. Contrasts are of various kinds. There is the contrast of warm and cold colours; and there is the contrast of green with red as complementary colours—very different to the contrast which there is in the case of blue and yellow. We may have "Harmony by Contrast," "Harmony by Analogy," "Harmony of Tones," and "Harmony of Hues;" whilst there are colours which diminish or raise each other's effect, and light colours which brighten those of a deeper kind. "Harmony" may be defined to be "the *due proportion* of two, or more colours, which are concords; and the *balance* of colour is equally required for those which accord by contrast as by analogy." As regards contrast,—

"Colours are opposed to each other in different degrees. 1st. The strongest opposition is by *positive contrast*, when the colours are of different hues and natures: as black and white; blue and orange; scarlet and blue, &c. Of these, Mr. Field says (p. 26), the only two contrasting colours which are of equal powers are 'black and white,' 'orange and blue;' and 'all other contrasts are perfect only when one of the antagonistic colours predominates.' 2nd. *Opposition, or contrast, of warm and cold colours;* among the former of which are reds, yellow, orange, brown, red-purple, &c.; among the latter, blue, grey, green, blue-purple, white, blue-black, &c. 3rd. *Opposition, or contrast, of dark and light colours;* or *opposition of tones*, is when the colours are tones of the same hue, one stronger than the other, as dark and light yellow. 4th. *Opposition*, or *contrast*, of accidental colours, is when a colour and its accidental companion are opposed to each other, as red and green; blue and orange; yellow and purple. And though black and white are accidental to each other, they cannot be said properly to belong to this class; nor is positive white ever mistaken for its accidental companion, as other accidental colours are, through a defective vision or colour-blindness. These two properly come under the first class as positive contrasts; and the greatest and most violent contrast is between those two colours. Nor do all other accidental colours contrast with each other in an equal degree, or under the same conditions; and I cannot too often repeat that, because blue and orange are most harmonious contrasts, it does not follow that red and blue-green should be so, and still less green and reddish violet, which are a most obvious and disagreeable discord."

Two colours may agree by the Harmony of Contrast; by the Harmony of Analogy; by the addition of a third (without which they would be wanting complete harmony), or by the addition of several colours: whilst sometimes a colour is better *by itself;* and sometimes a colour is better as a ground for others. Some colours *disagree* "from being positive discords;" some fail to accord from their tones being of unequal intensity; some in cases where proportions in quantity have been disregarded; and some, as mentioned, from wanting another colour to complete the harmonious combination,—as blue and red, "though concords," require the addition of yellow.

Our author gives a list, of considerable length, of combinations of colours, with remarks, and adds references to well-known books as regards examples; and in the course of a summary of his observations, after repeating that the eye is the proper judge of colour, and that the perception of it is a natural gift, and that we should abstain from theories till the subject is understood, he sets forth that,—The primaries (which are a concord) should predominate in ornamentation, though scarlet will generally combine better than red: that the purple effect of red and blue should be obviated by other colour, or as before mentioned: that the accidental (complementary) colours do not necessarily harmonize: that harmony is not limited to similarity, but includes contrast, whilst there are contrasts of different kinds: that the effect of the "simultaneous contrast" (of Chevreul), is to be taken into account; and that the "intensity of tones of colours should be equal in the same composition; but a dark and light hue may be used together with good effect." Also, quantities are to be balanced: some colours being required in smaller quantity when combined with others; and the relative positions of the colours; the effect by candlelight and by daylight; the things decorated, whether carpet, wall, or dress; and the kind of ornament; the requirement of "repose;" and avoidance of spots and monotonous lines, have all to be considered. Bright green may be introduced to lighten up a composition, but not in masses unless as a ground, though candlelight allows the use of a greater proportion of green.

The first part of the work, on colour, we should say includes several pages on the proper treatment, and the characteristics of the different styles, of stained glass.

Whatever comes to us from the hand of so painstaking and minute an investigator as Sir J. Gardner Wilkinson, could hardly fail to be worthy of attention. He may not have adopted the best arrangement of his matter, and may have introduced some which might be called irrelevant; but his work will be read by many who have felt the defects of previous theorising, and who will get the juice of it, to the clearing of their own ideas and the improvement of their handiwork, possibly forgetting the debt they will owe.

VENTILATION IN WHEELED VEHICLES.

THE question of ventilation has been much discussed of late, and, no doubt, some persons act up to their knowledge; but such individuals form only a small fraction per cent. of the entire population; and the numbers who fully understand what ventilation is, and who consistently strive to secure it, probably constitute only a fraction of the fraction.

Ventilation has been ventilated under many headings, and volumes have been written and published, explaining systems and apparatus calculated to secure it. We only propose, however, just now, to throw together a few remarks on the absence of any adequate means for ventilation in wheeled vehicles, generally. Ventilation should secure change of air for the breathing of human beings, in private houses, in public buildings, and in public and private carriages;—that is, there should be means of instant escape for air that has been once expelled from the lungs; or, for such extreme dilution as to reduce the chances of any consequent injury to a minimum.

That vitiated air may escape from the vicinity of a living human body, there must either be certain cubical space around each person, or proportionate areas of openings. To box up four persons for the shortest time, in, say a private carriage, containing not more than some 60, 80, or 100 cubic feet of space—*empty*—must be injurious. Now, how many of our readers commit this folly during cold weather? Again. Look at first-class,—or, indeed, at railway carriages generally, and say, if means to change the air are provided. In some railway carriages there are small ventilators; but when there are six persons in a first-class compartment on the narrow gauge and eight in a compartment on the broad gauge, the means for ventilation are inadequate—injuriously inadequate; but during cold weather, there are persons who will close these ventilators, and keep them closed during a journey of several hours. We fully admit the evils of a draught, the unpleasantness of cold; but there is a consideration superior to these. Take the space of any railway-carriage compartment, and the air-space for each person when the compartment is full will not amount to 50 cubic feet,—all things considered, scarcely half this. Now, in a prison cell, each occupant has 1,000 cubic feet of air-space, with regular change of air by artificial ventilation; so that, at the best, a close-carriage compartment is some twenty times worse, as regards means of ventilation, than a prison cell. The best railway carriages, as at present constructed, have two evils: they are insufferably hot and dusty in summer, and the means of ventilation are miserably inadequate at all times. Take another class of public vehicles—public cabs and omnibuses. Are these sufficiently ventilated? For four-wheeled cabs we say "No;" and who does not remember the old omnibuses with horror, especially when full, on a damp and foggy evening? The new Metropolitan Company, whether French or English, and in spite of dreadful mismanagement, deserves the warmest thanks of the community for the vastly improved 'bus of the present time. The fixed openings, modified by perforated zinc, and the top louvre windows, allow of rapid change; but not more than is necessary for comfort and health.* Shall we ever see analogous changes and improvements in cabs, in railway carriages, and in private carriages?

There are some persons who cannot ride in any conveyance with the windows up, and there are

* In some of them, however, the zinc perforations open right upon the heads or necks of all above the average height.

many persons who suffer by being exposed to a direct draught of air: it must, therefore, be a desirable improvement so to build wheeled vehicles that both class of persons may be accommodated. There should be abundant means of ventilation arranged so as not to inconvenience or injure by draughts, and which cannot be tampered with. The new omnibuses may teach a most useful lesson to carriage-builders, as in the best of these vehicles there are abundant means for change of air without injurious draughts.

The questions of draughts and ventilation deserve more consideration than they obtain. All our old proverbs are against draughts, but we are not aware of any against foul air, and yet the latter works more injury than the former. "If you sit near a hole, God mend your soul," has frightened many a person into closing up means of ventilation. We may invent a new proverb, and say, "If you sit in foul air, in comes your heir." Another proverb has it, "Avoid a draught as you would an arrow;" and it is wise advice. Still we check this proverb, by "Avoid stagnant air, if for life you have care." Englishmen, probably, dread draughts and fresh air less than the inhabitants of any other nation; but even in England we see that the best means are not taken to secure change of air in public and private wheeled vehicles. Improvement has been commenced, and we do not doubt but that it will go on. If any carriage-builder will take our hints, and usefully work them out, both credit and profit will arise to him we are sure. If the improvements deserve it, he may patent them, for anything we care. Public cabs, railway carriages, and private carriages should each have means for change of air at all times, with both windows fully up. The Hansom cab is taken not more for its lightness and speed than for its means of freedom to the open air.

Travelling has become so common that it is of the utmost importance to secure comfort and health during a journey. The weariness, nausea, and headache, after a journey, come not so much from the motion as from the vitiated air of a close carriage. As private carriages are now built, it is a misfortune to some who are in a condition to use one. To be ordered "carriage exercise," may be the contrary of an advantage. An *open* carriage for invalids is not at all times desirable, and to some temperaments not agreeable; but certainly a *close* carriage must be injurious at any time. There should be means to secure a full change of air without the chance of palpable draughts. This may be done, and will be shortly accomplished, if we interpret the spirit of the times aright. Cabs and carriages, as ordinarily built, are too low even for comfort, and this makes them too low for safe ventilation. The roofs require to be raised a few inches; and, if double, the means of ventilation may be provided by a false roof, properly chambered, so as to admit of inflowing fresh air and outflowing currents of foul air from the "ceiling," or inner roof, over the largest practicable area. Riders may have carriage-caps especially provided to protect from colds. The question of *colds* is, however, as much one of defective ventilation as it is of any changeableness in the climate. Trace the coughers to their domiciles, and we shall find, in nine cases out of ten, rooms full of foul and stagnant air. Medical men have found out the fact that even consumptive patients require fresh air rather than warm stagnant air. Fresh air is a prime requisite of health, and this must be secured in our wheeled vehicles.

We write in accordance with our convictions, and in opposition to our sensations.

SCIENCE AND RELIGION.

MUSEUM OF GEOLOGY.

AT the close of the first course of Lectures to Working Men this session, delivered by Professor Huxley, F.R.S. ("On Objects of Interest in the Collection of Fossils"), the lecturer made some observations on the subject at the head of this article, and it has been urged by several of his hearers that the publication of these remarks in our columns would be useful. In complying with the request, we take the opportunity to mention that Professor Ramsay will deliver a course of lectures here on Geology, and Professor Willis one on Applied Mathematics. It ought to be known that the professors of this Institution derive no profit or advantage, direct or indirect, from them. Even the nominal registration fee goes to the Government.

The lectures have now been given for seven years (in fact, ever since the School of Mines was established); and, as an invariable rule, the tickets have been applied for at once, and the attendance has been extremely good. So far as we know, the tickets are always disposed of to *bonâ fide* workmen, and it is impossible to speak too highly of the attention and intelligence of the audience.

The professors may reasonably expect, therefore, that they are doing some good, and they are entitled to the thanks of the public.

And now, gentlemen, the proper subjects of this course are ended. My duties towards you, as an officer of this institution, cease; but I am glad to have the opportunity, on my own responsibility, of saying a few words on a subject which, judging from the letters I have received, interests you as much as it does me. At the same time, I am most desirous not to be misunderstood; and, therefore, instead of taking up this subject in the lecture which immediately followed the letters to which I refer, I have allowed myself a longer interval for reflection; and, contrary to my wont, I have written down in full, and will read, what I have to say.

The whole history of the gradual discovery of the significance of such apparently unimportant indications of formerly existing life, as those which I have been describing to you to-night, is fraught with instruction. It is one of the most striking of the many justifications which might be found, of the methods, not only of geological, but of all other science; and it helps, as much as any of these, to teach us what implicit and absolute faith we may place in the conclusions of the human intellect, when that intellect is rightly guided.

In fact, this is the moral of all science; and the great and peculiar benefit which a fair course of scientific study confers, even on those who do not follow it as a profession, is, that it compels such a firm and entire faith in our mental processes, so far as their range extends; that it teaches us what this range is, and enables us to distinguish between the natural and the artificial limitations of man's powers.

And let me bid you remember that this faith does not rest upon mere testimony, however respectable, however solemnly supported. The works of science are her witness. Her age of inspiration and of miracles is not over, but beginning, and its duration will be coeval with that of the intellect of man. Nor is access to her deepest secrets restricted to a race or to a priesthood. Every man can, if he so pleases, apply to the sources of all scientific knowledge directly, and verify for himself the conclusions of others. In science, faith is based solely on the assent of the intellect; and the most complete submission to ascertained truth is wholly voluntary, because it is accompanied by perfect freedom, nay, by every encouragement, to test and try that truth to the uttermost.

I have said that our faith in the results of the right working of the human mind rests on no mere testimony. But there is *One* that bears witness to it, and He the Highest. For, the winning of every new law by reasoning from ascertained facts; the verification by the event, of every scientific prediction, is, if this world be governed by providential order, the direct testimony of that Providence to the sufficiency of the faculties with which man is endowed, to unravel, so far as is necessary for his welfare, the mysteries by which he is surrounded. Donati's comet lately blazing in the heavens above us at its appointed time; the first quiver which betrayed to the anxious watcher of the telegraphic needle on the other side of the Atlantic, that an electric current would follow, even under such strange conditions, the laws which man's wit and industry had discovered; the bone which, laid bare by Cuvier's chisel, justified his trust in the law of organic correlation which he had discovered; all these, and hundreds of other like cases which I might cite, are to my mind so many signs and wonders, whereby the Divine Governor signifies his approbation of the trust of poor and weak humanity, in the guide which he has given it.

The present state of civilized nations and their past history bear witness on the same side. So far as any nation recognises, or has recognised, the great truth, that every dictum, every belief, must be tested and tried to the uttermost, and swept ruthlessly away if it be not in accordance with right reason, so far is that nation prosperous and healthy; and so far as a nation has allowed itself to be hood-winked and fettered, and the free application of its intellect, as the criterion of all truth, restricted, so far is it sinking and rotten within.

There is one restriction, and only one, so far as I know, placed upon our supreme arbiter. It is, that it shall be actuated by an uncompromising and unswerving love of truth. With that, the human intellect is the nearest impersonification of the Divine; without that, it is, in my apprehension, the worst of conceivable devils.

Such being my inmost and deepest belief on these matters, the friend, if I may so call him, who was good enough to write me the letter an extract from which I am about to read, will readily anticipate what answer I am about to give him. I can but regret that it should be so directly opposed in appearance to his own views, but he has asked me to speak out, and I will do so. After all, there is perhaps less difference between us in reality than in seeming.

Referring to a previous lecture, he says,—"One or two imagined that you, in your own theory, advocated the idea that a lower animal might, by development or progression, pass, in time, into one of a higher organization; and they would apply this through the whole animal kingdom up to the human race, in opposition to the first pair being brought into existence by the direct power of our Creator."

The one or two are nearly, but not quite, right. What I said was this: that the bringing into existence of an animal, at once, is a thing which is, in the nature of the case, capable of neither proof nor disproof, and is, therefore, no subject for science, which concerns herself only with matters capable of proof or disproof. And I went on to say, that if the appearance of the successive populations of the globe had followed laws at all similar to those by which the rest of the universe is governed, I could not conceive but that these successive races *must* have proceeded from one another in the way of progressive modification.

And that *is* my hypothesis, and I *do* include man in the same category as the rest of the animal world. But you will recollect, that I begged you particularly to understand that I regarded this notion of mine simply as a hypothesis, reasoned out from general principles, and wholly devoid of evidence amounting to proof.

Well, if you see good to reject this hypothesis, if you think that my reasonings from the principles I started with are fallacious, or that those principles themselves are erroneous, reject it by all means; and if you can show me, *on these grounds*, that you are right, I will reject it also as speedily as possible, and thank you for the refutation. Why should I cumber myself with the burden of an untruth?

But you all know right well that such are not the grounds on which hypotheses of this kind are objected to. The real reason is, that such doctrines are supposed to be antagonistic to religion, or rather, to be opposed to certain traditions handed down to us with our religious beliefs, from a venerable and remote antiquity.

Now let me tell you quite frankly, that I almost think it beneath the dignity of my calling, as a man of science, to listen to such objections as these. If it be *really* true that science is opposed to religion, all I can say is, so much the worse for religion. If science is *really* opposed to traditions, the sooner the traditions vanish and are no more seen or heard of, the better. For science, and the methods of science, are the masters of the world.

But it is not true. If you have seen occasion to put any faith in what I tell you, believe me now when I say, that of all the miserable superstitions which have ever tended to vex and enslave mankind, this notion of the antagonism of science and religion is the most mischievous.

True science and true religion are twin-sisters, and the separation of either from the other is sure to prove the death of both. Science prospers exactly in proportion as it is religious; and religion flourishes in exact proportion to the scientific depth and firmness of its basis.

The great deeds of philosophers have been less the fruit of their intellect, than of the direction of that intellect by an eminently religious tone of mind. Truth has yielded herself rather to their patience, their love, their single-heartedness, and their self-denial, than to their logical acumen.

And all the reformations in religion—all the steps by which the creeds you hold have been brought to that comparative purity and truth in which you justly glory—have been due essentially to the growth of the scientific spirit, to the ever-increasing confidence of the intellect in itself—and its incessantly repeated refusals to bow down blindly to what it had discovered to be mere idols, any more.

It is above all things needful for you, working men, to note these truths. For with the limited time, and the limited means for study at your disposal, you run the risk of flying to one of two extremes — bigoted orthodoxy, or conceited scepticism.

The more earnest and deep-thinking of you are not always able to distinguish the eternal truths of religion from the temporary and often disfiguring investiture which has grown round them, as, at this Christmas time, we see the ivy and the mistletoe overgrowing the oak; and when science comes, and would tear away these mummy-wrappings, and show you the form within in all its beauty, you—too often urged by those who call themselves your teachers—raise a cry of sacrilege, as if the holy of holies itself were defiled.

And, on the other hand, the quicker-witted and less serious spirits are apt to rush from a like misconception into the opposite error. They imagine that because no honest man can, for one moment, reconcile the plain teachings of geology with the statements contained in the book of Genesis; because no astronomer believes that the sun and moon have stood still at the bidding of a Jewish commander-in-chief; because, in short, whenever and on whatever pretext science and authority have come into conflict, authority has always been signally worsted, and will be till the end of time; because of these things, they imagine they may disown all the Ten Commandments, and treat with foolish ridicule the book which the true man of science will ever hold in the highest respect, as containing the noblest and the clearest exposition of human rights and human duties extant.

I warn you solemnly against both of these evils. Despise both bigotry and scoffing doubt, and regard those who encourage you in either, whether they wear the tonsure of a priest, or the peruke of a Voltaire, as your worst enemies. And if you seek a preservative against these snares, I say, strive earnestly to learn something, not only of the results, but of the methods of science, and then apply those methods to all statements which offer themselves for your belief. If they will not stand that test, they are nought, let them come with what authority they may.

THE TURIN AND GENOA PRISONS COMPETITION.

THE Minister of the Interior has published the Report of the Commission nominated by the Government, to examine the designs for a prison at Turin, and for one at Genoa, submitted in competition. It appears that seventy-eight designs were sent in—forty-two for the Turin prison, and thirty-six for that of Genoa—and the following is a list of those competitors of whom mention is made:—

TURIN.

Premium to No. 11.—"*Le prigioni debbono essere incombustibili.*" Luigi Dan and Carlo Dan, civil engineers, Naples.

1st Accessit,—No. 30.—"*E a salute e non e danno.*" Pollani Guiseppe, architect.

2nd Accessit,—No. 51.—"*Salubrité, sécurité, surveillance.*" C. Schack Jaquet, architect, Geneva.

GENOA.

Premium to No. 11.—"*Le trombe idrauliche arrestano gl' incendi, ma non li prevengono.*"

1st Accessit to No. 40.—"*E pluribus unum.*" Paolo Olivari, engineer, Genoa.

2nd Accessit to No. 4.—"*Ainsi soit-il.*" A. Morsaline, C. architect, Paris.

Competitors may obtain their designs after the 1st of February next.*

PHOTOGRAHY.

THE PHOTOGRAPHIC SOCIETY'S EXHIBITION.

THE Exhibition opened by the Photographic Society, in the Gallery of the Society of British Artists, Suffolk-street, includes 643 works, contributed by ninety-four photographers! What a hive of industry has been put into action by Messrs. Fox Talbot, and Daguerre! Who that listened to Mr. Talbot's first paper on the subject, read a very few years ago at the Royal Society, imagined that it would put so many minds and hands to work,—afford such wide-spread enjoyment, or profitable employment, to so many hundreds of persons all over the world, as it has done? The Collodion process reigns supreme, and we do not find any new masters in the art threatening the position of those who are best known in it. The great feature of the Exhibition is the set of photographs from the cartoons at Hampton Court, by Messrs. Caldesi and Montechi, an admirable work, supplemented by Mr. Thurston Thompson's fine studies of heads at large, from the same originals, so that these remarkable creations are now opened to the near study of all. Mr. Hamilton Crake contributes some valuable additions to our knowledge of Indian remains; such, for example, as the views of the Parthsadiah Pagoda, Madras (156), the Seven Pagodas, in the same presidency (165), and others. Mr. Roger Fenton is an important contributor; and has sent, besides numerous landscapes, showing that amount of air and distance for which his works are remarkable, some illustrations of Eastern costumes and manners. Mr. Frith has some charming specimens; notice particularly 547 and 558. For delicacy and clearness conjoined, Mr. Francis Bedford is unrivalled,—see, for example, his North Transept, Tintern (137), Pembroke Castle (139), and the West Front of Tintern (143). Mr. W. H. Bosley's frame (522) lends a countenance to the abuse of the art to be seen in some of the shop-windows, which it ought not to find on these walls. Dr. Diamond, to whom photography owes much, exhibits amongst other things an excellent set of interesting portraits of "Our Club."

The frame of stereographs, 510, is remarkable as the result of the first important photo-literary exploit. It consists of views in Brittany, by Mr. Taylor and Mr. Lovell Reeve, illustrative of a walking tour by Mr. Mounteney Jephson. We shall have many such before long.

Looking now more to the general question, we may note that, as regards the application of photography to wood for the purpose of engraving, there is still much difference of opinion. When looking at some of the best efforts of the art, a person of artistic taste, but who was not acquainted with the conventionalities of engraving on wood, would think that these sun pictures of bold objects would be the very things to suit the engraver. Engravers, however, have a strong opinion that photography cannot in this way be rendered available to any great extent. They say that the immense amount of detail in a photograph would cause an amount of labour which would greatly overbalance the cost of a drawing on wood, by a practised artist, which would be adapted to the engravers: besides there are certain arrangements of light and shadow which they say are necessary for the purposes of printing. They refer, for instance, to the works of Gilbert, Thomas, Foster, and others, which when engraved and printed, are remarkable for the force and brilliancy of their effects, and contrast them with the engravings from photographic pictures which have been executed on prepared blocks, or from a careful *fac simile* drawn by the draughtsmen on wood. It is argued that the appearance of any architectural object or landscape can, if faithfully sketched and then transferred to the wood in the ordinary way, be conveyed to the great bulk of observers in a more striking manner than by means of photography.

While submitting to some extent to the opinions of many who have for years practised the art of engraving on wood, we cannot but notice the wonderful progress which photography has made during the last few years. Our belief is, that for many purposes photographs on wood will supersede the hand-drawings at present in use, especially for engravings of art-manufactures, objects of natural history, illustrations of anatomy and scientific subjects, &c.—in all of which the greatest neatness and attention to detail ought to be a chief recommendation. The value of photography in this department is evident, and no doubt some engravers will break through the present conventionalities, and adapt these sun pictures on the wood both to the engraver and printer.

Even in other subjects the application of photography may be useful to the present English school of wood engraving, which, notwithstanding its great merits, might be improved by a little more of the work which is a characteristic of the German and French wood engravings.

The *Photographie News* details a new mode of applying photography to engraving on wood. A suitable block is covered, in the darkened laboratory, or by candle-light, with a mixture composed of oxalate of silver and water, to which may be added a little gum or pulverised Bath brick, to suit the convenience of the engraver. The mode in which the oxalate is spread over the surface is precisely the same as that employed by the draughtsman on wood in applying the preparation of flake-white and gum-water. A little of the substance—that is to say, about as much as would lie on a fourpenny-piece for a block 4 inches square—is sprinkled on the surface, and the finger then being dipped in water (either with or without a little gum), the mixture is spread evenly over the whole surface of the block by rubbing the finger backwards and forwards across the block in various directions, until the evaporation or absorption of the water leave the surface impregnated with a delicate and almost impalpable coating of oxalate of silver. The block may then be placed in a drawer, or any other place from which the daylight is excluded, and left to dry, or for any length of time until required; and it has been stated that no deterioration or loss of sensitiveness has been detected, in blocks thus prepared, in six months, so long as they remained protected from the light.

Oxalate of silver is susceptible of being acted upon by the actinian rays, and when the block has been prepared in the manner above indicated, it is only necessary to expose a negative in the printing frame to sunlight, and a positive picture is obtained in the same manner as on paper prepared in the ordinary way. The block requires no subsequent washing, nor any preparation of any description before being placed in the hands of the engraver, so that he receives it precisely in the same condition, as regards the surface to be operated upon, as under ordinary circumstances. The engraver, however, must not expose the block to the direct action of the solar rays while working at it, as it will gradually blacken on the surface:* exposure to diffused daylight, however, has no deleterious effect on it, unless it be continued for a length of time—say several hours.

It is impossible, when looking at the examples of this art which have been lately produced, to avoid speculating on the probable results of the processes which enable photographs to be printed from with rapidity in the same manner as in lithography. Wise men shake their heads at this, and say, "It will never do." The same was said when etching was applied to plate engraving; and it is remarkable that for a long time the etcher endeavoured to the utmost to imitate the stiff lines which were produced by the graver instead of those of the free pencil which the etching needle could so readily produce. People shook their heads at lithography when in its infancy: the race of head-shakers never dies. The locomotive, the electric telegraph, and all other great things, have been doubted and looked upon as impossibilities or absurdities; but these, by the labour of those who would not doubt, have been made to confer benefit on the world at large. In the same way we have faith that the exertions which are being made to apply photography to the purposes of printing will be attended with important results.

The greatest desideratum in photography at the present moment, is the certainty of obtaining a picture which will not fade.

ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE first meeting since the Christmas recess was held on Monday evening last, at 16, Grosvenor-square.

Mr. Hussey, V.P. occupied the chair.

Mr. Edward J. Payne, of Birmingham, and Mr. Albert J. Humbert, associate, of 12, Middle Scotland-yard, were elected fellows of the Institute, and Mr. Josiah Houle, of 9, Guildford-street, Russell-square, was elected an associate.

A very fine series of photographs, from the celebrated collection of Etruscan antiquities belonging to the Cavaliere Gio-Pietro Campana, honorary and corresponding member, were exhibited, and excited a good deal of attention. Models of windows, by Mr. B. Shaw, and of Pugh's patent clock, were also exhibited.

Sundry donations were announced, and thanks were voted to the donors.

Mr. C. C. Nelson (honorary secretary) stated that he had received notification of the decease of two associates—Mr. T. C. Tarring and Mr. F. T. Digweed.

The Chairman said it devolved upon him, as president of the meeting, to announce that the late librarian had been expelled from the institution.

Professor Donaldson observed that the circumstance to which the chairman had referred had caused the council a good deal of regret, and that it was proper to state that there was no connection, either by relationship or in any other way, except the accidental one of name, between the person referred to and a respected Fellow of the Society whom they all knew. He had also to announce, that by direction of the council he had written a letter of condolence to the widow of

* Those gentlemen who were concerned in sending us a letter some time ago on this subject, giving the names of English architects as the successful competitors, will probably think it necessary to inform us on what grounds that statement was made.

* This would not be a great drawback; for, in order to protect the pencilling of drawings executed in the ordinary way, it is usual to cover all drawings on wood with paper while in the hands of the engraver, and only to tear off a small portion of the paper at a time.

M. Montferand, of St. Petersburgh, lately an honorary and corresponding member of the Institute, and one of the most distinguished architects in Europe. He had also to state that he had been directed by the council to put himself in communication with the Sardinian Government in reference to the competition for the intended public works at Turin and Genoa, and that he had received from the Minister of His Majesty Victor Emanuel a copy of the *Piedmontese Gazette* of the 3rd of the present month, containing the report of the commissioners who had examined the various designs sent in for competition. Mr. Donaldson then stated the names of the successful competitors, which will be found elsewhere, and pointed out that of these none were English.

Mr. M. D. Wyatt called attention to the volumes of photographs lent to the Institute by Mr. Robert Phillips, representing several of the classical marbles and objects in terra cotta in the museum of the Marquess de Campana, at Rome. He observed that the marquess, having considerable property in the Campagna of Rome, had caused extensive excavations to be made at his own expense, and had purchased up every antiquity that came into the market. His great competitor in the work of collection was the late Pope Gregory, who also succeeded in collecting an immense number of objects of ancient Etruscan art. The Gregorian museum, as a whole, excelled no doubt that of the Cavaliere Campana; but the collection of the latter contained some features superior to those of the pontiff's museums. The Cavaliere embarked the greater portion of his wealth in buying up works of art. His collection consisted of twelve parts, of which the marbles and terra cottas were alone represented in the photographs submitted by Mr. Phillips. The Majolica, the bronzes, and other objects were, however, equally fine. Should the Great Exhibition of 1861 be carried out as contemplated, he (Mr. Wyatt) hoped that some means might be found to bring the entire collection to this country. The Cavaliere Campana was one of the most distinguished and liberal-minded among the Roman nobility, but he had now, unfortunately, reaped the fruits of his liberality, and was immured in a prison.

Mr. Ashpitel observed that the Marquess de Campana had been at the head of the Mont de Piété, at Rome, which was a sort of bank, intended more especially for the advance of money to necessitous persons. In his capacity of head of the bank, he received money from depositors, and lent it out at a higher rate of interest than he paid, as all bankers were accustomed to do, otherwise there would be no profit from the operation of banking. He had lent himself, from time to time, considerable sums of money, which were entered in the books of the bank in the usual manner, and the interest upon which was regularly paid as it accrued. It was well known that the Marquess de Campana was accumulating his museum, and that, in point of fact, it was security to the Government for the advances made to the owners. It seemed that, during the revolution at Rome, the marquess committed what was considered to be a great crime by remaining in the city after the Pope had fled. That one of the old nobility should remain at a moment when every one said that Rome was going to ruin because the pontiff had fled, was considered to be a crime, and the enemies of the marquess came down upon him in a moment, and he was charged with embezzling the money which, as director of the bank, he had advanced to himself for the purpose of buying up antiquities. In vain he assured them that he had abundance of property to meet every demand upon him; that it was well known that he had borrowed from the bank on the security of his museum, and that he had duly paid the interest like any other customer. It was all to no purpose: he was seized and flung into prison. This gentleman, who was one of the noblest-minded men in Italy, a scholar and a virtuoso, most intimately acquainted with art, was condemned as a common galley-slave. There was no trial by jury, or appeal, and although he has not been actually set to work at the galleys, he was at this moment a close prisoner in one of the vilest holes in the castle of St. Angelo, which was known to be one of the worst prisons in Europe. His final liberty now mainly depended upon the sale of his museum. If, therefore, any of the members of the Institute could forward the sale of the museum, or assist in any way in bringing it to Europe, they would be doing the greatest service to the cause of humanity and art.

Mr. Charles Barry inquired what steps had been taken towards bringing the museum to England or selling it.

Mr. Wyatt replied that nothing had as yet been done. The trustees in whose hands the property was at present vested had not adopted any measures for the purpose; but if the Great Exhibition of 1861 came off, it was believed that certain capitalists in this country might be enabled to obtain possession of it under a guarantee or otherwise, so that it might be exhibited here, and ultimately sold either in Paris or in London.

Professor Donaldson called attention to the proposition for the improvement of London, as suggested by M. Hector Horeau, and exhibiting at the Hanover-square Rooms; and stated that any members of the Institute would be admitted to the private view on the 17th instant, on presentation of their cards.

Mr. Edward I'Anson (Fellow) then read a very elaborate paper on the recent Improvements in Paris, with especial reference to the enormous Works completed or in course of construction since the accession of the present Emperor of the French. The writer gave the cost of the various works and improvements effected, and included an account of the mode adopted in Paris, of arranging the amount of compensation with the owners of property required, particulars of which are given in one of our recent volumes. At the conclusion,

The Chairman said that the meeting had reason to feel indebted to Mr. I'Anson for his able paper, on a subject which had especial claims upon the attention of those whose lot it was to inhabit a metropolis which needed considerable improvement. Paris was admitted to be the gayest and most beautiful metropolis in the world, while London, although the largest and the most wealthy, was, with the exception of its noble parks, the dullest and least interesting in an architectural point of view. There were, no doubt, some portions of the metropolis which might not come within this definition; at the same time, it must be admitted that neither our public buildings nor our street architecture were, as a whole, such as we could wish to see in such a capital. It was to be hoped, however, that in time we should improve in these respects. The French, as a nation, possessed a large share of innate taste, and they looked upon ornamentation as an essential part of architecture, little caring, or, indeed, perhaps inquiring in what proportion it might add to the original cost. This could not be said of the English people, who looked upon ornament rather in the light of a luxury, and not as an essential and component part of architecture. John Bull was a calculating animal, and first counted the cost of a building (as he was quite justified in doing), and then came a fit of grumbling and a yearning for economy. The consequence of this was, that when the scheme was carried out, it ran the risk of being spoiled, either from want of efficiency in the general arrangement, or from being starved. Many people, for instance, would rather see pumps in the streets than drinking-fountains, on the narrow principle that pumps would answer quite as well, and cost much less money. It was gratifying, however, to perceive that the public taste was improving in the matter of architecture; and as a considerable advance had also been made in the profession of the architect, it was to be hoped that the two-fold effect would produce a gratifying result in the improved appearance of the metropolis. Many of the public buildings lately erected were very much superior to their predecessors.

Mr. Ashpitel observed, that Mr. I'Anson had omitted one important point, when describing the manner in which compensation for land and buildings was arranged in Paris; and that was, that a large proportion of the claims were settled by arbitration, each party appointing an architect as umpire, and leaving the question of compensation to be settled by them. He mentioned this fact to prevent the meeting from supposing that in disputed cases everything was left to a jury. The great difference between French and English juries was this: that the former constituted themselves judges of the fact, while the latter sometimes allowed themselves to be led away by the flashy speeches of counsel. He believed that with this exception the *modus operandi* of adjusting claims, was nearly on a par with that adopted in England. He begged to suggest, that as the hour was so late (owing to the length of the paper read) it would be desirable that an opportunity should be afforded of discussing it on a future night. At the same time it was becoming that Mr. I'Anson should receive the thanks of the meeting, which he begged to move accordingly.

The vote having been agreed to, several members expressed their desire that an opportunity should be afforded for discussing the subject of the paper, and it was ultimately left to the council to name an evening for that purpose.

KING'S BILLIARD-ROOMS, MARK-LANE.

FENCHURCH-STREET and its neighbourhood have been considerably improved during the last three or four years by the erection of several first-class buildings adapted to the requirements of the business of the day and locality. Great indeed have been the changes since the time that Queen Elizabeth dined at the well-known tavern "The King's Head," at the corner of an ancient avenue called Star-alley, leading from Fenchurch-street to Mark-lane, in which is situate the ancient church of Allhallows Staining. Here, overlooking the churchyard, and immediately opposite the mediæval tower of the church, stood several ancient timber erections of the Fire of London period. These have been recently removed, and an improvement to the locality comes in the shape of a building now in course of completion for Mr. George King, under the superintendence of Mr. John Young, jun. architect, of King-street, Cheapside. It has a frontage of 70 feet in Star-alley, with a return frontage of 28 feet (at which point it is connected with the tavern adjoining), and the total height from the level of the pavement is upwards of 50 feet. The entrance, beneath an enriched doorway, is in Star-alley, and leads to a flight of stone steps therefrom to the top of the building, having panelled balustradings of cast-iron. On each landing an arcaded vestibule is formed next the stairs, having enriched friezes, entablatures, semi-arches, with spandrils having a "King's Head" surrounded with foliage, supported by Ionic columns and caps with wreaths, and moulded surbases and plinths. The floors consist each of two large and lofty rooms, divided by screens of similar construction to those next the stairs, but with attached columns. The ceilings are panelled and enriched with flowers, being prepared to receive coloured decorations, but these are not yet determined on. The windows have large squares of plate glass with embossed patterns. The doors of the best rooms are of Spanish mahogany. The chimney-pieces, from the manufactory of Mr. Magnus, are good specimens of enamelled slate. Mr. Robert Walbutton, of Great Trinity-lane, is the general contractor.

ARCHITECTS AND SCULPTURE.

THE following is an extract from the speech of M. Fould, Minister of State, pronounced at the recent distribution of prizes of the "Ecole des Beaux-Arts," as reported in the *Journal des Débats*:—

"Without confounding the painter with the statuary," said M. Fould, "or the architect, I should like to see you generalize more your studies, and restrict yourselves less to what pleases you the most. I should like that a good architect could, if not execute, at least judge with authority of the works of the statuary or the painter whom he calls to adorn his buildings. I should like that, in their turn, the painter and the sculptor, initiated in the rules of architecture, could adapt to the places which are to receive them works whose effect in their final places is often very different from that which they produce in the studio. Harmony and unity, which are the true beauty and the true grandeur, should thus be attained in our monuments. It is not with the arts as with industry, where subdivision of labour produces prodigies. In the arts the perfection of a whole does not result from the perfection of each of its parts. A work of art is not a thing quite inanimated: life exists really in it: it is that sentiment which is found everywhere and cannot be assigned anywhere. The ancients have excelled in the art of animating their works only because they possessed that general and complete instruction which sound studies give. To remind you only of the most brilliant models, Leonardo da Vinci was as excellent a sculptor as he was a great painter, and joined to the practice of these two arts almost universal knowledge. Michelangelo, the painter of 'The Last Judgment,' has built St. Peter's at Rome, and decorated with matchless sculptures that chapel of the princes of which he had directed the construction. Raffaelle himself, the first of the painters whose days can be numbered by his *chefs d'œuvre*, has left, as architect, several monuments which still to this day serve as models."

NEW CHURCH IN SHOREDITCH.—A new church is about to be erected for the district of Haggerstone, in the extensive parish of Shoreditch.

THE LATE DR. ENGLEDUE.

THE friends of sanitary reform in Edinburgh and of improvement generally are grieving the loss of Dr. Engledue. In losing him, the poor have lost one of their best friends.

The *Portsmouth Times*, in a feeling sketch of his career, says, there has not been within memory, among all classes of the community, a gap so wide and grievous as that caused by his passing from amongst them. Besides originating the Portsmouth Hospital, in the year 1850, he projected public baths and washhouses and drying-rooms at Landport. He was an active and laborious worker in every sanitary improvement, and even at a time when such things were deemed visionary and useless. He laboured largely for the education of the public mind, and was one of the first commissioners appointed under the Health of Towns Act.

Nothing which could improve the condition or elevate the taste of the operative classes, was beneath his attention. About two years since he established at the Philosophical Institution an exhibition of pictures, to which the gentry, through his personal influence, sent contributions, and to which artizans and their families were admitted at a nominal price. He was an active supporter of the New Water Company, the success of which he always felt to be likely to promote the cleanliness and well-being of the poor. Dr. Engledue had faith in the redemption of criminals by the use of proper means, and stoutly denied that capital punishments are likely to stop crime. In the winter of 1857-58, he undertook, at the request of some literary bodies, to give a course of twelve lectures on "Human Physiology," which were only completed so lately as March last, and in which he expressed his view that the great object of the medical profession was rather to teach men to avoid disease than merely to cure it when contracted.

Within a few weeks after the termination of this course — the opening of a small tumour, that had been unimportant in itself, led to his contracting erysipelas (*a dire disease which had invaded the hospital owing to its bad drainage*), and which made him a fearful sufferer. For some weeks his life was despaired of, and his frame was shattered. From this attack he recovered; but, to the grief of his numerous friends, all his energy had left him, and his great powers of conversation seemed palsied: subjects in which he had been engaged,—visions of the fair and good for the future,—had lost their interest and attraction, and, like many other earnest labourers for their fellows, Dr. Engledue passed away, not being "of sound mind, memory, and understanding," but lunatic and distracted, at the too early age of forty-five years!

BIRD AND OTHER WINGED SYMBOLS.

THE ANCIENT DOCTRINES INVOLVED IN THEM.*

ONE of the most characteristic and curious of all the unearthed Assyrian symbolical sculptures is that of the man-god or god-man of Khorsabad, with the "*egg*-shaped cap," as Bonomi terms it, and the double set of *wings*. This figure has one pair of wings raised and one pair depressed. It is considered by Bonomi to represent "the god Cronus, the Ilus of the Phœnicians, and the Allah of the Arabians, all derived from the Hebrew word El, God."†

Sanchoniatho thus describes Cronus:—

"The god Taautus, having portrayed Ouranus, represented also the countenances of the gods Cronus and Dagon [another great Assyrian god], and the sacred characters of the elements. He contrived, also, for Cronus, the ensign of his *royal power*, having four eyes, —in the parts before and in the parts behind,—two of them closing as in sleep; and upon the shoulders four wings, two in the act of flying, and two reposing, as at rest. And the symbol was, that Cronus, *whilst he slept, was watching, and reposed whilst he was awake*. And in like manner with respect to the wings, that *he was flying whilst he rested, yet he rested whilst he flew*."

In one of the Nimrud sculptures the egg-capped and double-winged man-god is throwing thunderbolts, or lightning flashes, at a winged and vulture-clawed and evil-looking griffin, who is running away from him. One leg of the man-god is covered or clothed, the other uncovered or naked. In the Khorsabad sculpture he is *offering* a cone.

Before attempting to explain these somewhat complicated and mysterious symbols, which afford a fair basis or text around which may be woven a few further general ideas of those doctrines, as to the soul, the body, and the spirit, death and resurrection, apotheosis and salvation or immortality, which are inextricably involved in the bird and other archæological or sculptured and otherwise recorded symbols of the ancient heathen nations, all so peculiarly connected with their religious beliefs; I may here slightly advert to the obvious analogy between the Cronus of Sanchoniatho and the Roman Janus. True, in the Janus, we have not the wings, either double or single; but we have the clear symbols of a "double watch" in the twofold aspect, that of an old man and that of a youth conjoined; and, that the Romans *had* the distinct idea of a double state of waking and of sleep connected with the symbolical Janus appears from a curious traditional ejaculation, or saying, which is still preserved in old Latin dictionaries, namely,—"Jane! *Quae* tu dormias?" or, by way of a free translation,—Which of you sleeps, O Janus,—the old man or the young, the soul or the spirit, the natural or the spiritual, the human or the divine?*

I may also here observe, that it is a well-known circumstance, that almost all heathen gods were double in idea, and in general male and female. Thus, in the East, we have the Brahminical books speaking of "the wives of the gods in the form of birds;" and these wives are often depicted in the arms of the gods as "little children," like Zingarel the beautiful "spirit life," and "companion in eternity" of the Titanic Ravan. In these and other instances, as with the Druids, who were first eggs and then birds, or first men and then gods, we have the soul-life, while absorbed in the spirit, as the male principle of the gods, and the spirit life itself as the wife of the god. Thus, too, in the more western myths, there was even a bearded or male Venus, as well as a female one; so that a sort of hermaphroditic idea widely prevailed amongst the Gentiles, though not always clearly associated with a double state of waking and of sleep, as in the case of Cronus and of Janus, or a double state of life and of death, alternating by turns one with the other, "daily," or otherwise, as in the myth of Castor and Pollux.

Plato, in "The Banquet," gives, in the words of Aristophanes to Eryximachus (see p. 508, vol. iii. of Burges's translation), a strange account (symbolical also doubtless) of "our nature of old." It was "double," he says, or "man-woman,"—a *tertium quid*, in short, which was neither male nor female exclusively, but both in one. "It had four hands, and legs equal in number to the hands, *and two faces* upon the circular neck, *alike in every way*," and so on. "For our *iniquity*," he tells us, "we have been cut in twain," but when we are "reconciled to *the god*," then the "meeting of counterparts" will take place, and till then "each is in search of his counterpart." This doubling of the body, or its members, curiously reminds one of many of the Hindoo idols, with their double heads, and four hands and arms, four legs and feet (with eyes occasionally in the feet), &c.; and it was even declared of an ancient Buddhist Delai Lama, that, when he visited Tartary, it was observed that he had four arms and hands.

It may be that Plato, or his interlocutor, derived the idea of the double man from the far East, or from Assyrian tradition; but it is at all events an interesting circumstance that the ancient books, ascribed to Hermes Trismegistus, which the sages of the Thebais of Egypt possessed, and which Plato speaks of having seen, treat of just such a twofold nature in man as Plato somewhat coarsely, yet no doubt, as I have said, symbolically describes.*

Thus, in the fragmentary treatise of "Regeneration," Hermes Trismegistus is made to say,—

"Man, above all things that live upon earth, *is double; being hermaphrodite*—or male and female—*and watchful*."

This passage might almost be capable of a simpler explanation than Plato's, were it not that other portions of the context, which I shall afterwards have occasion to quote, prevent such a possibility. As it is, we have here what Plato had forgotten,—the allusion to watchfulness—a double *or male and female watchfulness*—in connection with the double or hermaphroditic man.

I may here also remark, by the way, that a double-winged human-shaped symbol was found sculptured on the portico of Dendera, according to Denon's plates (129). This symbol is likewise somewhat complex. It consists of two human figures, *feet to feet*, the one "reversed," or upside down, with a winged (night-light, "noctiluce," or) beetle on its head, and clothed in female attire, while the other is in male attire, and has double wings. The Egyptian Horus (son of Isis and Osiris), too, I may add, is called (on an obelisk at Rome) the "guardian of *the double watch*."

Let us now reconsider, for a moment, what we have already gleaned, in the previous article (p. 688 of last volume, from various kindred symbols and ideas of the ancients, philosophical and religious, in explication of the winged and other symbols now and before described.

One of the most manifest and leading ideas or conclusions deducible from all the quotations, and their varying combinations, offered, as to ancient heathen doctrines, in my former article, was this; —that, dormant in the heretofore mysterious depths of the dark and desolate, death-like void of oblivious and dreamless sleep,—but *beyond*, or *trans*cending even these, *restwards*, there lies, unevolved, in the possibilities of human nature, "another life," or habitable land, as it were, of existence, veiled and unseen, yet closely and inseparably associated with "this life;" just as *beyond* the vast Atlantic waste of *waters, westwards*, there exists another hemisphere of solid, life-sustaining, and available territory,—one whole half of the continental globe itself, indeed; although it lay, till the days of Columbus, veiled and hidden from "the old world,"—utterly forgotten, or heretofore unknown, and even unsuspected; but, in fact, obscurely and traditionally hinted at by Plato, and alluded to in other dim traditions of the olden time.

To *cross*—to *pass over*—the wide waste, or the *devious and resistive currents*, of dreaming and oblivious sleep, and to "arouse," or "wake up," this *other* and diviner sleeping *life* or *vigil-power*; —to "resurrect" this mysterious and ultra-natural "dead" one, and yet "living" though more glorious "double," "image," "counterpart," or archetype rather, of ourselves, who rests in "the sepulchre" of "the body" in "this life,"—"slain from the foundation of the world" that "now is," in fact,—we found, was the grand aim and end of ancient religious mysteries in general; and, were we to fill volumes, as could readily be done, with quotations as to these same mysteries, still and ever would it be found that the burthen of the whole, directly or indirectly, was the *awakening* of this *sleeper*, — the "invocation" of this "god"—this extinct, yet germinative, opening *bud or flower of life*, or holy "life of the gods" in man,—the "crossing of the

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* Mistaken notions of some imaginary connection of the curious and interesting ancient Egyptian, Druidical, Assyrian or Chaldean, Greek, Roman, Buddhist, Brahminical, and other ancient Heathen doctrines, herein indicated and explained, with certain quasi-Christian, "spirit"-moving, Swedenborgian, mystical, or other ideas of less ancient or more modern times, induce me to request you to allow me here to assure your readers that *they have no such connection, dependence, or similitude*; that they have been dug directly out of the quarries of ancient lore by my own exclusive labour (and that of the respective translators), directed by no one's guiding ideas or suggestions, mental lights, or master-keys, but mine; and that, *as yet, they exist, in a printed form, nowhere* (nor anything at all, in reality, like them, so far as I know), *except in the Builder*, and, in a scattered and disintegrated form, throughout those ancient sources (original and translated) whence they have *now, for the first time*, been collated, re-organized as it were, and dragged into light, in the restricted and imperfect form which they have incidentally assumed, in the mean time, as an attempted explanation of one merely out of many kinds of archæological and other symbols, originated and used by the ancient heathen, in connection with those religious doctrines, *common to them all*, which I am thus attempting, under difficulties, to explain,—doctrines which are likely, I should think, *when really and properly understood*, to startle and surprise (as they did myself) even those who are so erroneously imagined to be already familiar with them, as their own.—J. E. D.

† By an old theological writer named Hutchinson, El, which, in the Old Testament throughout, is translated "the Lord," is rendered "the Irradiater," a name peculiarly significant of the Lord, "the Sun of Righteousness," and "the true light, which lighteth every man," whether as in the reflected moonlight of "this life," or in the direct sun-light of "another life."

* Speaking of Janus, I may here remark, that on an ancient coin of the island of Tenedos, off the coast of Troas (between Egypt and Constantinople), there was a Janus old and young on one side, and a cross on the other, the two arms of which were mainly two bells, beneath one of which was an owl, and beneath the other a bunch of grapes;—and that the Egyptians by the owl and the crow are said to have symbolized two opposing principles, pursuing one another with *deadly* intent. The owl destroyed the eggs or deposits of the crow by *night*, and the crow those of the owl by *day*. The owl is said to have been the hieroglyphic of *death*, and the crow of *life*. The owl, need I here add, was sacred to Minerva,—the divine wisdom, who sprang suddenly from the head of her father Jove, a perfect woman. The owl was clearly denotive of the life or waking of the night—the spirit-life, which is Minerva herself. The crow was probably denotive of its opposite—the day-life—the soul-life or ordinary waking. The owl, with the bell, would denote the waking life and living voice of the night, or spirit-waking and oracular utterance; and the grapes and bell the life of *day* or of the *sun*, yet not a true life. The "hawk," so distinguished an Egyptian symbol, is declared by Hasselquist and others to be "the screech *owl*—Stryx," and the owl (not, it seems, hawk) headed deity is "Rhe the sun,"—the "midnight sun," in fact. This owl surmounts all else on the obelisks.

* While alluding to Plato and his symbolical disquisitions, I may here remark that his account of the soul's wings, and their sprouting quills, is exceedingly curious, although I have no space in these articles for quotation of his detailed and somewhat lengthy observations on the subject. The reader, however, may be referred to his works, and particularly to "Phædrus."

terrible sea of mortality" to "the opposite shore" of the Buddhist nirvana, "delivered from existence," in "the bark of spiritual knowledge," by "crossing over all *iniquity*" ferried in this "bark;" or "the passing over of the ocean of dark oblivion" to absorption into God, as with the Brahmins,—the rending of the veil of sleep—the *shadow* of death—and the entrance boldly through it to this holiest place of the human temple;—and, that not only was it *possible* so to transcend "the spirit of slumber," and to "become a god," but also to return thence, as often as desired; and that herein lay the grand road to "human perfection," that man should "often exchange this life for the life of the gods," just as he "often" as yet "exchanges" this life, of ordinary waking or watching, for the short-coming and *imperfect* rest or repose, and oblivious bliss, of ordinary sleep.

That *beyond* the wild waste of sleep, restwards, there should exist a possible state of *cool, sober waking*, just such as exists—though less spiritual or divine—on this side of that wide Babel of misrule and mad confusion in life, one cannot readily conceive; but, however inconceivable (without the philosophical and physiological master-key),—that the divine and oracular life, evolved in "the sacred sleep" of entrancement, *was* decidedly regarded as a life of cool, collected "waking," watching, or vigilance, and "sight," or "beholding," can easily be proved by a few additional quotations, the sole difficulty here being the question of space and permissibility in the *Builder* for doing so. As it is requisite, however, to a thorough understanding of the symbolical Cronus, and the other double-winged and sleep-waking symbolical personages, as well as to a like understanding of those doctrines of the soul and the spirit, death, resurrection, and immortality, which I am endeavouring to elucidate, that some such proofs should be offered, perhaps the following may be admissible.

Thus, Porphyry says that the ecstatic life of the gods is "not a vision, but *another kind of seeing*;" and Plotinus says "it is a *direct beholding*." The quasi Hermes Trismegistus, in speaking of it in the Thebaic treatise on Regeneration, says,—"They that are capable and can draw any store of this *spectacle and sight*, do many times fall asleep from the body into this most fair and beauteous vision. . . . . I would *we* could, O Son! but for the present we are less intent to the vision, and cannot yet *open* the *eye* of our *minds*."* Again, in allusion to this regenerative process of the second birth, he says,—"The sleep of the body was the *sober watchfulness* of the mind, and the shutting of my eyes the *true sight*;" and speaking of this "mind," he calls it "my Mind that is Pimander the great *Lord* of the Word, whereby I became inspired;" and again, "This is the mystery that to this day is hidden and kept secret,—life, the soul, and light, the mind."† In expressing his desire, however, that Tatius, his disciple or "son," should acquire "the true sight," he certainly *seems* to forget himself slightly, where he says, "I would, O son, that thou, also, wert gone *out of thyself, like* them that dream in their sleep"; but *we* must not, ourselves, forget, on the other hand, that the "sober watchfulness" of "the true sight" was only to be reached by rising "out of" himself, through the thick and heavy clouds of that very dreaming sleep itself, like a bird on the wing, up into the pure ethereal heaven *beyond* and above the clouds. As for "this life," or the ordinary waking life of the soul, he calls it "the living death, the sensible carcase, the sepulchre carried about with us."

In "The Symbolical Interpretation" of "Ravan's Dream," we have a Brahminical "fourfold state" described, in the waking body, the dreaming body, the sleeping body, and the "spirit-waking" or spiritual body; and the Interpreter goes on to say,—"The three bodies, existing in the waking, dreaming, sleeping states, are all known, WITNESSED, and *watched* by *the Spirit*, which standeth behind and apart from them, in the *unwinking vigilance* of ecstacy or *Spirit-waking*." Were the Interpreter's own initiative idea of the *twofold* life, and body, natural and *reversed*,* here adopted, rather than his more developed fourfold state, we should have almost the identical idea of "Isis, *the protectress* of her brother Osiris† [protectress of the man, in fact, who has "become" Osiris by being energised and re-collected, and so falling asleep *in* Isis "the midnight sun" of the "Noctis Societas"], and *behind whom she stands, covering him with her wings*," and watching over his safety, as the winged "guardian angel" of the west "watches over us while we sleep." In the "watching" of Zingarel, the child-like "spirit bride" of Ravan, while *he* "sleeps," we find the very same eternal and universal, mythical and protean, truth displayed,—still in almost identical terms,—in the east as in the west.‡

The "descent of the soul" from the celestial life of ecstasy to the terrestrial waking-life, by the way, is itself also described by the Interpreter of Ravan's Dream, almost as if he were an Egyptian hierophant. In speaking of the soul's fall out of the paradise of spirit-waking into the earthly state of soul-waking, he says,—"The first spiritual state was ecstasy: from ecstasy it forgot itself into deep sleep: from deep sleep it awoke out of unconsciousness, but still within itself, into the internal world of dreams: from dreaming it passed finally into the thoroughly waking state and the outer world of sense," where "the *spirit* is *shut up* [or imprisoned] in the *cell* of the *soul*." Again he says,—"That land of silence and *shadows*, of *desolation* and ruins, of *sorrow* and *death*, is *the world*, in which thy *dead* body now walks *waking*. Renounce and *annihilate* it, O king! by asceticism and divine gnosis, and *thus return to* REAL LIFE."

The Brahminical *descent* or fall out of Paradise through the "deep sleep" between heaven and earth was something like the "reverse" of Adam's "deep sleep," when Eve, the quickener, the second Adam,§ was created *in* Paradise. In the descent or fall, out of Paradise, just described, the soul is said to have "emerged on the hither side of the Lethean boundary [of sleep] to a *false* or *reversed* knowledge of things"—"viparita dnyana,"—the *true* and *natural*, correctly speaking, being the spirit waking, and the soul-waking *its* reverse. Between these "lies a gulph of Lethe, or total unconsciousness—a profound and dreamless sleep." In the Dream of Ravan itself

> "Mysterious and *illumined* sleep,
> The body's *trance*—the spirit's *seeing*"

is spoken of as the

> "Condition of the *free*—the *doubly blest*,
> *Highest activity in unbroken rest*;" ‖

which recals us forcibly to Sanchoniatho's description of the double-winged and double-waking Cronus, who rested as he flew and flew as he rested, sleeping while he woke and awake while he slept.

The old Hindoo sages believed this life—*that is in fact ordinary waking*, and nothing else—to be but a dream of "the *sleeping* god." In *his* waking, "this life" is "absorbed" in "the next." The code of Menu pronounces the waking state to be one of deceptive appearances—a life among mere phantasmata; that of sleep as a little nearer *reality*; while that of the ecstacy of entrancement presents the reality itself—the truth,—reveals a new world (*in* the old*) and enables the divine or spiritual eye, which opens when the human closes, to discern the inmost reality of all creation, or to "see into the life of things,"—as Wordsworth has it, while actually thinking, it would seem, of this entranced and strange new state of waking existence itself. In short, it is as if the world were thus WITNESSED in its *subjective*, interior, and real aspect† by the spirit life, while this same world is witnessed only in its *relative*, exterior, and phænomenal aspect by the soul-life. Milton is Brahminical in his implied doctrine when, in the "Paradise Lost," he asks

> "What if earth be *but the shadow* of heaven?"
> * * * *
> "And heaven be turned to earth and earth to heaven."

It was "*in the night* of *time*, when all things *rest*," that the Yogi "waked"—in the "*day*" of "*eternity*" [*the chain of time unlinked*, as it were, being "eternity"—not endless time; for eternity is "*beyond* or beside *all* time."] The Yoga, however, or practice of "awakening" the spirit-life, or "plunging into eternity," in the "night of time"—or indeed at any time,—is admitted to be at present "impracticable," although there are still pretenders to it. Nevertheless Christna teaches that "the wisely devout"—the Brahminical spirit-life, in fact—"wakes in the night of time when all things rest, and sleeps in the day of time when all things wake;" and this responds to what is said of "this life,"—ordinary waking, or the *waking man*, being but "a dream of the *sleeping god*."

It is full time for us now, however, to revert to Sanchoniatho and his double-winged divinity Cronus, who waked while he slept, and flew while he rested. We can now pretty clearly perceive that if the fully-developed nature of man be "twofold and watchful;" that if it be possible to transcend—to *sail* or *fly* across—the wild ocean, or to rise through the dark clouds, of dreaming and oblivious sleep, from a waking state on this side of it to a no less waking state on the other, and "thence return,"—*each watchful or waking state sinking into sleep and rest in the arms, as it were, of its fellow*;—the "perfect man" so PENDULATING between these two full "reverses" or extremes, will actually *wake while he sleeps, and act* (*and* in mental act *fly*) *while he rests*; for in the "highest *activity*" of the *spirit* there will be "unbroken *rest*" to the *soul*; and, *vice versâ*, there must be "unbroken *rest*" to the *spirit* in the "highest *activity*" of the *soul*.

But another little dip into the philosophy of the ancient religions or mythologies may make this still more clear, our special purpose being in this to discover, as far as possible, the ideas entertained of the respective special and peculiar *natures* and *powers* of the *soul* and the *spirit* which are thus believed to play, into each other's hands, the game of life, "in and out" of the body, which each is supposed alternately to "possess" or occupy, and "lead" or move, more especially in its own proper state of watchfulness, waking, or "life."

The Rosicrucians taught that there are two kinds of life, "the *compound* life" and "the *elementary* life." The compound is the human or *soul*-life. The elementary is the sylphide or other *spirit*-life. It was the *duty* of the sages, by fasting, watching, prayer, and contemplation, to bring about "a Rosicrucian *marriage*" with the elementary or spirit-life. That life was the companion and bride of man (of the compound life) in Paradise, and the desertion of this his spirit-bride constituted the very fall of man itself. The grand purpose of the brethren of the Rosy Cross was, *by help of the spirit-life*, to bring about the entire *regeneration* and the perfection and salvation or immortalization of man, in body and soul and spirit. As in the Eleusinian initiation, "science, genius, and immortality" were to be the fruits of the glorious alliance which the sages,

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* In reference to this new kind of vision, seeing, or beholding, of the waking rest-life of the night, the following scriptural allusions to visions are interesting, whether by comparison or by contrast:—"Night shall be unto you that ye shall not have a vision, and the sun [of seerism—the sun which "rises in the night,"—"the midnight sun"] shall *go down over the prophets* [or not "stand still" over them], and the day [of the Lord, which "cometh, like a thief, in the night"] shall be *dark over them*. Then shall *the seers* be ashamed, and the diviners confounded. . . . . It shall be *dark unto you that* ye shall not divine." (Micah iii. 4, 6.) "The word of the Lord was precious in those days: there was no *open vision*." (1 Sam. iii. 6.) "When there is no vision the people perish." (Prov. xxix. 18.) "In a trance I saw a vision." (Acts xi. 5.)

† This "Light," or "Mind" and "Lord" of inspiration, accords with the Holy Spirit "which teacheth us all things and bringeth all things to our *remembrance*"—all things to *mind*,—and in which, as in the living fountain of memories and of soul-irradiations, "are hid all the treasures [*collections*—acquisitions] of wisdom and knowledge." *It* is "the true light, which lighteth every man that cometh into the world," *and is hence a constitutional and essential principle in every man*, as much so as the *life* or *soul*, whose dark concentrative its irradiations enlighten or *illuminate*, either in the reflected moonlight of "this life," or in the direct glory and sunlight, or "day," of the "divine" life "to come"—"in the night of time," as "the Spirit of Rest," "the Comforter" and *refresher* of mankind, and the *restorer* or *reverser* and *mortifier* of the constrictive and *decaying* processes of "this life."

* "There is a natural body and there is a spiritual body," and "the flesh lusteth against the Spirit, and the Spirit against the flesh, and these two are *contrary* one to the other," or *reverses* of each other. Suidas tells us out of Isidorus that the soul had once a glorious luciform body, which even now exists in this dark terrestrial body of ours, like light in a dark lanthorn. On an Egyptian mummy alluded to in the *Athenæum* of the 19th of June last, there is a picture of a "dead" man with two bodies, "one red or earthly, and one blue or heavenly," reminding us of the blue robe of the Druidical bard of the second origin, dead to this life, and alive to the next, or—of the race of the gods. With another mummy, recently imported, by the way, there was found a bird of splendid plumage, as large as the peacock. One feels almost inclined absurdly to ejaculate,—"Was it not the phœnix?"

† Between the Egyptian doctrine of the *scattering* and *re-collecting* and *re-uniting* of the members of Osiris, and the Brahminical, which speaks of "the Yogi who energizes himself to *re-collect* and *re-unite* his *scattered* self *by internal contemplation*," preparative to plunging into the divine abyss, there is a close and obvious affinity. The following, from the Brahminical books, too, reminds us of Isis herself: "May the goddesses whose wings are unclipped, the *protectresses of mankind*, favour us with protection and with entire felicity."

‡ The winged figure, on a wheeled cross with rays, which is sculptured above the Assyrian king, with bow in hand, and lightning flashes, or thunderbolts, for arrows, and *simulating the king's own attitude*, appears to be of the nature of the guardian angel accompanying the king. It resembles the Ferocher of Persia, which has been supposed to have a common origin in name with the Fairy and the Peri, or Huri, of Hur, or Paradise. In the Highlands of Scotland an idea prevails that every one is accompanied through life by a simulacrum or image of himself.

§ Genesis v. 2.:—"He blessed *them*, and called *their* name Adam."

‖ See *Dublin University Mag.* Oct. 1853, April, 1854, for several of these quotations,—viz. from the translated "Dream of Ravan."

* "Within the *city* of Brahma the five Pranas [or "supernatural faculties?"] *are watchful and* RADIANT; and *the seer beholds that which he did and saw* WHEN AWAKE."—*Ennemoser.*

† *Relations* have *subjective* terms on which they are *based*: it is in this sense, and not as in contrast with "objective," that I here use the term subjective: in the sense used the subjective is the true objective, and the relative is based upon it, and is but a shadowy reflex of it.

sought. By the help of their spiritual brides, they could penetrate into all the secrets of nature, and "see into the life of things;" and this accords with what the Taliesin says of the Druidical god-life.

The ancient Buddhists also taught that life (though they scarcely regarded it as such) is twofold. "Pravritti," or the "concretive," state is the life that now is. "Nirvritti," or the "discretive," "dissolvative," or "dispersive" state is not death, but an "eternal" (or non-temporal) reversal "extinction" or "cessation" of the "being" of pravritti, but in itself is the divine and holy, saving or immortalizing, state of a Buddah—the state of "the god,"—just as "divine absorption," with the Brahmins, though also an "extinction" of "the life that now is," constitutes the state of Brahm. The dispersive or dissolvative state "extinguishes" or annihilates the concretive upon which it is superinduced, just as the state of water puts an end to, or annihilates, the state of ice upon which that state of water has been superinduced. In nirvritti the state of pravritti *no longer exists* in short, just as, in the *conversion* of ice into water, the state of ice no longer exists: it is *extinct*. But the water can be reconverted into or may be made to return to the state of *new* ice; and just so, though the concretive or *constructive* life of pravritti, or the ordinary waking life, may be "extinguished" in the "dispersive" or *de-structive* nirvritti, which is a state or interval of perfect, consummate, and entranced "repose," or rest, "reversal," and counteraction to "the life that now is," that state of rest may not only be entered into but returned from; or rather, he who enters into it never returns: it is a "*new* man," *ab initio*, who is derived from it.* Students of these doctrines have raised up mountains of difficulty in their own path, and without the least real occasion. There is quite as much "annihilation" in the Brahminical doctrine of absorption as in the Buddhist doctrine of nirvana. The man who enjoys nirvana has his life blown out, or extinguished, *like a candle at bed-time*, when he goes to sleep, but in no other sense or way. He that so loses his life for the sake of the god who dwells in nirvritti *will* therefore find it again, *concreted anew*, after every *melting*, into a more and more perfect and still more perfect and beautiful mould, till at last he is completely "*modelled* into a *perfect* man," as the Taliesinine "Castor" was by *his* "Pollux" the "radiant" Hu, who "lived and died *alternately*" with him in the "glorious body" he transfigured and immortalized, as a temple for himself—"the glorious god"—and for his "servant" the "soul" thus by Hu made one of "the deathless brotherhood." In St. Paul's earnest desire to "attain" to the "death" of self, in the "resurrection" of the Lord within him, we have a doctrine of self-annihilation, and of life, death, and resurrection, to which the Buddhist and the Brahminical are as like, essentially, as can be. Nirvritti, or nirvana, was believed to be consummate repose, "felicity," *and even salvation and immortalization*, to the life plunged into it; but of the last two of these doctrines I cannot further speak. Meantime, my more immediate purpose was to trace out the respective and special natures and powers, active and watching, of the soul and the spirit, or "the life and the light," in some of these ancient doctrines; and I think that, if we may attempt to reduce the special powers and natures in question to something like scientific or philosophical principles;—and, to a right understanding, especially, of the doctrines of salvation and immortalization dependant on these principles, such a reduction of ancient mysteries to the revelation of modern scientific principles would be absolutely requisite;—we may in the meantime conclude that it is now made obvious, as far as our limits will allow,* that the soul-life was regarded both by the Buddhists and the Rosicrucians as a state essentially concretive, constructive, and compounding, and hence a state in which compositive or constructive, and consolidative or constrictive physical power *prevails* in the body, and conceptive, comparative, and contemplative mental power in the brain and mind; for, indeed, these *are* all grand functions of the soul-life; and, to use a convenient *general* term, inclusive of the concretive and compound life in all its phases, corporeal and mental, they are all, according to these ideas, essentially *concentrative* in their nature and their power; while the spirit-life of nirvritti, and divine absorption, the dissolvative, destructive, or dispersive, elementary life, is the "reverse" or the antithesis, of the concentrative, or, in other words, must hence be regarded as *radiative* in its nature and its power; so that man's double nature, as a whole,—divine and human,—may be said, according to these doctrines, to be radio-concentrative, or concentro-radiative.†

Here the subject, I am conscious, becomes less than ever adapted to the pages of the *Builder*, although it now approaches closely towards a philosophical *and even a physiological* explanation of the very interesting heathen doctrines of apotheosis, perfectment, and salvation or immortalization, both of body and of soul, which doctrines constitute the climax and consummation of all the other doctrines,—of the soul, the body, and the spirit, death, and resurrection,—involved in the ancient bird and wing (as well as many other) symbols; on which latter doctrines and symbols, however, I hope I have, at all events, shed some light,—in one sense entirely new, though, in another, as old as heathenism itself.

I have now, moreover, occupied far more of your valuable space than I had led you at all to anticipate, and must here, therefore, apologise and, rather abruptly, conclude the present very restricted and imperfect disquisition on the religious and philosophical doctrines involved in the bird and wing symbols of the various Gentile nations.

JOHN E. DOVE.

* Vaughan, in his "Hours with the Mystics," says, in one passage,—"Silesius declares that the *dissolution* [or de-struction] *in* deity he contemplates does not necessitate the *loss* of personality, or confound the maker and the made. . . . But . . . *crystals and torrents must have separate laws.*" True: yet what although they have? Cannot crystals be reduced to torrents, and torrents to new crystals, as "often" as may be desired, for all that? *In* the torrents certainly we may *have no* crystals—*in* the deity *no* human or soul's personality: *that* may *there* be "extinct," *just as it* SEEMS *to be in oblivious sleep*; but in the re-conversion of the torrents into the crystals the *lost* state is restored; and "day by day" and "for ever" this *alternative* exercise of dual power, or power from two distinct sources,—concentrative and radiative,—as from cold and heat, may go on; the crystals melting or dissolving into torrents, and the torrents reconcreting or reconstructing into crystals, just as the heat or the cold may alternately prevail. Vaughan ascribes to certain mystics, as a sort of gross inconsistency and a ludicrous absurdity, that "while they placed perfection in *repose* and mystical *death*," they "have mingled much in active life." This is just as if one should wonder, as at an utter incompatibility, that men whose rest or sleep has been pre-eminently passive and profound are often wide awake! Vaughan's own beautiful simile of the crystals and the torrents might have suggested to him the correction of a fatal error which pervades the whole of his interesting work,—and, indeed, the works of the mystics themselves, and their quasi-practice too.

* The Brahminical "Prakriti," or "*plastic* principle" of Kapila, and its "reverse," the state of divine absorption, might have been added, had there been space for the purpose, to the Buddhist and the Rosicrucian ideas, as in truth identical with them; and so might even the *creative* and *de-structive* principles comprised in the two-fold Apollo of the Druidical and primitive Greek mythologies; as well as others of a cognate order.

* This appears to accord with the Scriptural idea, so far as *it* goes, of the nature of man, "in soul and in body and in spirit," man himself being the "living soul," and "the true light which lighteth every man," being the "quickening spirit." Here, then, is *El, the* IRRADIATER: and "as many as are *led by* the Spirit of God, *they* are the sons of God,"—the deified men, or man-gods, and the "only absolute gentlemen." But where are these? "The earnest *expectation* of the creature *waiteth* for the *manifestation* of the sons of God," in the great manifestation of the Spirit itself *in man*, when that Spirit shall be "poured out *upon* all flesh" at "the time of the end" of the world that now is," and the advent of "our Lord and his Christ" and of the world "to come." Then shall there be "*new heavens* AND a *new* earth, *wherein* [in both of which] dwelleth righteousness," for "the righteous have the promise of the life *that now is*, AND of that to come:" they shall be as "trees of righteousness," which "shall *take root downwards* [in the earth], and bear fruit upwards" in the "heaven,"—which is "within" them. Thus "the righteous shall *inherit* the earth," *and* "shall inherit the Kingdom of Heaven," being brought out of a state of pilgrimage in the earth, into "an inheritance [of earth *and* heaven], sure and steadfast, and that passeth not away." This is no less a Gentile than a Christian doctrine of life and immortality; and the time is contingent: man may "*haste unto* the coming of the Lord,"—who *is* our righteousness,"—this *rectifier* of the *balance* of life in the reunion of "perfection," *divine and human*, "laying righteousness to the plummet and judgment to the line," and so, transcendentally, freeing our original nature "from all *iniquity*" by the counterpoise of his own divine and purifying presence in "the body," which is his "temple." Such, and only such, will be the truly "righteous,"—not those who go about "to establish *their own* righteousness," but those who "submit themselves unto the righteouness of God," that righteousness being the Lord himself;—and in the *way* of righteousness *is life*, and *in the pathway thereof there is* NO DEATH;" for "the righteous" are the "remnant" who "shall be saved [at the end], for he will finish the work and cut it short *in righteousness*" and "rest;" and this is the not yet consummated "manifestation" of the "sons of God," and the great apotheosis of the human race in "the golden age" of "Paradise regained."

SANITARY PRECAUTIONS AGAINST DIPHTHERIA.

DR. J. M'GREGOR CROFT, in a letter to the *Standard*, states that in the Cork barracks, as far back as the year 1847, during the raging of the terrible famine which destroyed such a multitude, he met with a case of diphtheria, when the wards were being cleared by deaths from malignant fever, and this the doctor maintains was the first noticed in these islands. At this time cattle and pigs were victims to a species of murrain—pork was measly, potatoes were diseased, and at one time not a sound potato was to be found in Cork market. "Putting all these things together," says Dr. Croft, "and the time of the year, it was curious, out of the number of cases of typhoid pneumonia treated, that diphtheria, isolated, showed itself." After mentioning the symptoms, and remarking on the proper treatment of this fatal disease, he advises all as precautionary to provide "good ventilation. Clear drains and cesspools are important items for health; closets should always be kept free, and fumigated twice a week with disinfecting fluid (liq. sodæ chlorinat). If a house is lighted with gas, pure air admitted freely is essential. Wholesome meat is a necessary article. With all these precautions, no alarm or fright need be thought of. 'Cleanliness is next to godliness,' says the old proverb. Attend to these instructions, and I am certain that diphtheria will decline. One word more: If the disease does show itself, separate the patient instanter by a distinct room at the upper part of the house. Inhaling the steam of strong acetic acid in an earthenware vessel raised to boiling point, will be found of marked benefit in relieving the swelling of the throat: in some cases it acts as a charm. A mild aperient, constant warm fomentation to the external parts, beef-tea (concentrated), and nutritious diet, will, I vouch for it, be as certain a remedy as any treatment at present recommended."

THE ABBEY SCHOOLS, BARNWELL, CAMBRIDGE.

As an example of what may be effected by a single earnest man, these schools offer satisfactory encouragement to all who, under circumstances apparently hopeless, are labouring for the moral elevation of the poorer classes. For the information of those who have no cognizance of Barnwell, it may be mentioned that it is a densely-peopled adjunct to Cambridge, and supplies the latter with all its peripatetic dealers in miscellaneous articles of merchandise, a large share of its manual labour, and a still larger share of its crime. It occupies a large part of a parish containing 10,000 souls, and has long been more cultivated by the policeman than the schoolmaster. Part of it nearest to the town has long enjoyed the benefit of its comparatively respectable position, but the denser portion has until recently been abandoned to primeval darkness, and has existed a *terra incognita* for the Commissioners of Education. Here, where an infant generation of miscellaneous origin is constantly springing up, with morals as tattered as its garments, and with a future as dark as its present, an energetic clergyman resolved to plant the educational standard, and these schools are the result.

Twelve months ago the curate of the district, the Rev. S. B. Sealy, might have been excused some misgiving for the practicability of his dream, but, like a true man, he set to work to make it a reality. He collected subscriptions, obtained promises of grants from the Privy Council, the Diocesan Board of Education, and other sources, with the resolution "to take a school to the children if the children would not go to school," and the result must be most gratifying to even his most sanguine expectations.

The schools have a street frontage of 105 feet. They are divided into a girls' school and an infants' school, each 40 feet by 20 feet, placed at a right-angle to each other, and separated by a movable partition, by which means both can be thrown into one when needed for more than the ordinary purposes; there is a class-room to each school, and provision is made for about 120 girls and 200 infants. By the side of the schools is a convenient residence for the mistress in charge. Over the girls' porch is a room for stowing away the miscellaneous furniture of the schools; and above this is a bell-chamber, the whole being continued to a height of 65 feet, to form a ventilating shaft. This latter has been made to form an ornamental turret, the lower stage being square, the next octangular, and the upper cylindrical. The upper stage has a bold cornice, and is capped by a conical tiled roof, the skylight of which is broken by dormers, and finished with a wrought-iron terminal cross. The style is Domestic Gothic. Scarcely any stone has been used; but polychromatic effect has been produced by a free use of moulded bricks, the bulk of the building being of white brickwork, with red dressings and quoins. The windows have cusped heads, in white brick. There are two windows of five lights each, under a drop arch of 12 feet radius, and the tympanum thus formed is pierced by an eight-foiled wheel

window, in red brick. The roofs are covered with Ramsey plain tiles: the timbers of the roofs are exposed below the collar-beam, at which level the ceiling is fixed. Trap-doors in the ceiling communicate with the ventilating shaft for the discharge of foul air; and fresh air is admitted through the floor by a simple contrivance. All the buildings are lighted with gas, and an unlimited supply of water is obtained from the pipes of the town waterworks. The architect is Mr. R. R. Rowe; the builders, Messrs. Gray and Son, of Cambridge. The cost of erection will be about 1,150*l.*

PRESERVATION OF STONE IN BUILDINGS.

IN reply to Mr. Szerelmey's letter on this subject, I have only to say that, in the specification of his patent, dated July 2, 1857, I find that he proposes two preparations, one of which consists of a mixture of blood, caseous matter produced from milk, ground bricks, slag and clay, while the other is composed of gas or coal tar, linseed oil, resin, or asphalte, with hydraulic lime, grit and calcined flint: and I also find that, "although these cements may be capable of separate use, they are preferred to be employed in succession." As the work I alluded to in my communication was in full progress in the month of October last, I was perhaps justified in concluding that so large an experiment on a public building would hardly have been tried by the discoverer of a process, with a composition essentially different from one so recently patented by him, as applicable to the same case. If I am wrong in assuming that Mr. Szerelmey's patent "for rendering structures waterproof," sealed March 17, 1857, has no reference to the process adopted at Westminster, I shall be happy to be set right by the patentee; and you, sir, I am sure will gladly give publicity to any statement of facts in a matter which is really becoming of extreme public importance. At the same time I think your readers will agree with me, that the old saying, *fiat experimentum in corpore vili*, might have been remembered in the present case with advantage, and that it would have been prudent to expose some less important building than our new Palace at Westminster, to the chances of success or failure, which so very recent a discovery as that of Mr. Szerelmey must be subject to. D. T. ANSTED.

HOUSE DRAINAGE.

A PROPER system of house drainage has so long been admitted by all professional men to be absolutely necessary for the health of the inhabitants of this vast metropolis, that feeling any hint from a practical man is valuable, and when conveyed by your paper weighty and impressive, I have no hesitation in troubling you or your readers with this letter, which I shall confine to the question of private drainage, and more especially to *cesspools*, so ably spoken of in an article in your last week's number.

You have for many years pointed out to the public the importance of avoiding ill-drained districts and dwellings having no drainage excepting into cesspools or dumb wells, the exhalations from which pollute the atmosphere they breathe to the serious injury of their health. I have, during twenty years' practical experience, witnessed so much reluctance on the part of owners of house-property to effect any drainage improvements, that until tenants, who are the real sufferers, are fully impressed with the vital importance of the matter, and take up the subject, as I venture to suggest, I fear it will be a long period before you will have the pleasure to report that a cesspool is an unknown thing in London; but if they will assist you, a very brief time will suffice for the completion of that which we are *all* interested in, viz. that every house in London shall be thoroughly drained. I recommend that every tenant should, if a cesspool is known to exist upon his premises, insist on the landlord's immediately destroying it and properly draining the place into a common sewer; also, that every person, previously to taking a house, should satisfy himself by making inquiries of the surveyor to the vestry, or Board of Works for the district, whether the property is perfectly drained, and until it is so, refuse to occupy it.

If as an excuse it is stated that there is not any sewer sufficiently near, let the owner, with the proprietors of all adjoining buildings, make a proper application to the authorities to afford that accommodation, and I feel convinced that they will not shrink from carrying out a complete system of sewerage for their several districts. If such a plan as this were generally adopted, it would not only hasten the completion of the sewerage of the metropolis, but would soon produce a great decrease in the mortality of London. The owners of houses can put forth no reasonable argument why they should continue to impose unwholesome residences upon an unenlightened public. Shopkeepers who sell blown meat, putrid fish, &c. are amenable to police penalties: why, then, should he who makes his living, or, as it more generally happens in this case his fortune, by dealing in house accommodation, be exempt?

I hope you will continue to impress upon your numerous readers the great importance, to the health of *every one*, that each dwelling should be efficiently drained, and with the use of tubular stoneware glazed pipes: the expense is not one-half of what brick drains cost some years ago.

HENRY JOHNSON.

THE FOUNDER OF LAMB'S CONDUIT.

THE following notes in connection with a public benefactor, condensed from a paper by Sir John Hawkins, may not prove without interest at this moment:—

On the north side of Holborn was an aqueduct known by the name of Lamb's Conduit, as having been made by a person of the name of Lamb,—of whom, notwithstanding the many evidences of his munificence at this day existing in charitable endowments and works of public benefit,—very little is known, the several particulars that are recorded of him being dispersed in books now grown scarce, and never having been collected, as far as can be learned, or brought into one point of view. From the Survey of Stow, who was his contemporary, printed in 1633 (which edition is that referred to in this account), we learn that his name was William, and that he was some time a gentleman of the chapel to King Henry VII. and in great favour with him.

Among a great number of charitable endowments, and other acts of beneficence for which London is indebted to this public-spirited man, and which are recorded by the above historian, are the building of this conduit, near Holborn, and his gift to the company of clothworkers. Of the former of these, the edifice being destroyed, the remembrance is at this time nearly, and a few years hence (1807), will be totally, effaced; and of the latter, which was a donation in favour of poor persons, and the foundation and endowment of a chapel in a very obscure part of the city, so little is known, that to communicate what information can be obtained concerning it seems to be no more than what gratitude would suggest to every one who has it in his power.

Lamb was born at Sutton Valence, in Kent; and although his profession was that of choral music, was a free brother of the Clothworkers of the City of London. He was thrice married, and dying in the year 1577, was interred in the parish church of St. Faith, under the old cathedral of St. Paul.

The total sum of Lamb's several gifts exceeded 6,000*l.* Sir John Hawkins says that we are to suppose that Lamb had arrived at a state of great affluence, and had quitted the chapel at the end of the King's reign, for his name does not appear in the chapel establishment of his immediate successor, and that his wealth was derived from a source abundantly more plentiful than the emoluments of his profession, a poor one, indeed, which yielded him, in common with others, 7d. per diem. However, the money was gained, and Stow mentions that he was in a condition to make purchases, for he expressly says that he purchased of Edward VI. a hermitage, over which he built the chapel called by his name.

The following are the good works of Lamb:—He erected a Free Grammar School in the town of his nativity, and endowed it with a salary of 20*l.* a year for the master, and 10*l.* a year for the usher; and in the same town he founded and endowed six almshouses, with yearly pensions of 10*l.* for poor persons inhabiting the same.

To the Free School at Maidstone, in Kent, he gave 10*l.* yearly for ever.

He also gave to poor clothiers in the county of Suffolk, and the towns of Bridgnorth and Ludlow, 100*l.* severally.

He founded a conduit near Holborn, hereafter described, and caused water to be conveyed thereto, at an expense of 1,500*l.*; and gave to 120 poor women pails, therewith to carry and serve water.

He also founded and endowed with lands and tenements the chapel near Cripplegate.

Besides these, he made a donation of 15*l.* to the parish church of St. Giles, Cripplegate, to the bells and chimes; and other sums to the Company of Stationers, Christ's Hospital, St. Thomas's Hospital, and the Hospital of the Savoy. He also appropriated sums for the relief of poor prisoners in the two Compters, Newgate, Ludgate, the Marshalsea, King's Bench, and the White Lion.

Further, he gave for the marriage of poor maidens, 20*l.* to be equally divided among forty such. He also bequeathed legacies to his servants, and 188 frieze gowns to as many poor men and women attendants on his funeral, and directed that the remnant of his goods, after his burial, should be dispersed where need and reason required.

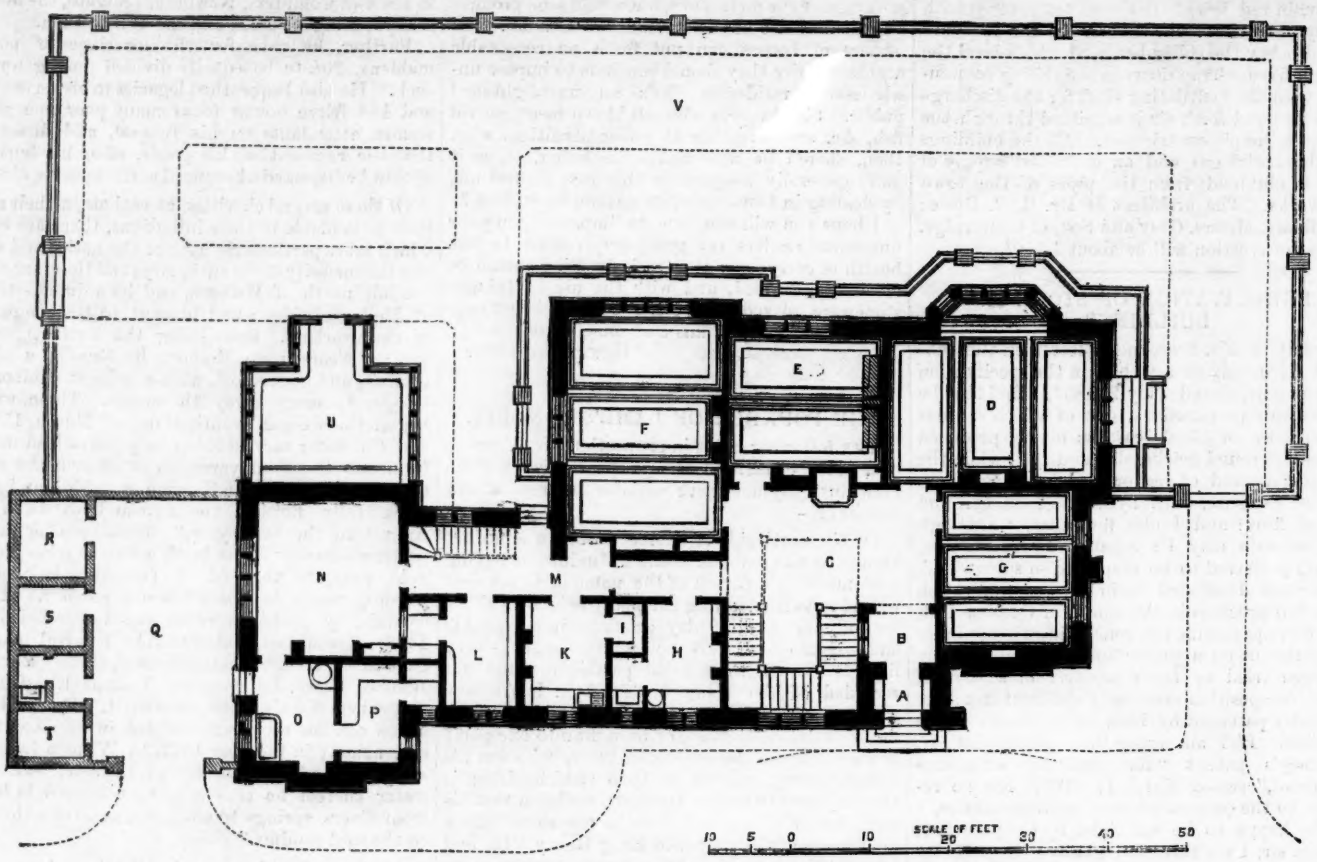
Of these several charities, as various in their nature as laudable in their intentions, there are two which more particularly attract the notice and excite the curiosity of the antiquary; and these are, the conduit north of Holborn, and its adjunct—that at Holborn-bridge; and his gift to the company of clothworkers. Concerning the former, Stow says: "Neare unto Holborn he founded a faire conduit, and a standard, with a locke at Holborn-bridge, to carry away the waste. These were begun the six-and-twentieth day of March, 1577, and the water carried along in pipes of lead more than two thousand yards, all at his own cost and charges, amounting to the sum of 1,500*l.* and the work fully finished the four-and-twentieth of August in the same year." Elsewhere the same writer states:—"There lyeth a streete from Newgate, west, to the end of Turnagain-lane, and winding north to the Oldbourn conduit. This conduit, by Oldbourn cross, was first builded in 1498. Thomasine, widow to John Percival, maior, gave to the second making thereof, twenty marks; Richard Shore, ten pounds; Thomas Knesworth and others did also give towards it. But of late a new conduit was there builded in place of the old, namely in the year 1577, by William Lambe, a citizen and clothworker of London; and the water thereof he caused to be conveyed in lead from divers springs to one head, and from thence to the said conduit."

Sir John Hawkins remarks that from the second of the passages above recited we learn that the water that supplied this conduit was first covered by divers springs to one head 2,000 yards distant therefrom. The particular spot of ground which concentrated these several springs is not pointed out by Stow, but, computing the distance of yards, "this we find done by the author of the 'New View of London,' published in 1707, who, though anonymous in this work, is well known to be Edward Hatton, surveyor of one of the offices of insurance from fire, who, under the head of 'Fountains, Bridges, Conduits, &c.' has the following article:—'Lamb's Conduit, at the north end of Red Lion-street, near the fields, affords plenty of water clear as crystal, which is chiefly used for drinking. It belongs to St. Sepulchre's parish, the fountain-head being under a stone marked S. S. P. in the vacant ground a little east of Ormond-street; and it runs thence in lead pipes to the conduit on Snow-hill, which has the figure of a lamb upon it, denoting that the water comes from Lamb's Conduit.'"

There is good reason to suppose that the conduit was destroyed by the Great Fire, which, notwithstanding the general belief, extended far north of Pie-corner. About twenty-five years before the publication of the first volume of "The Antiquarian Repertory," in 1807, "a conduit—a dry one, it is true, as all the City conduits had become—was standing in the place now spoken of, but its form plainly showed it to be a building of later erection than 1577," when a kind of mixed Gothic style distinguished the buildings of the era; whereas the latter conduit, for so we assume it to be, was so pure and classical in its style of architecture, that the design might, without injury to his memory, be ascribed to Sir Christopher Wren himself.

To describe this building with as much accuracy as mere memory will enable us. Its plan was an equal-sided quadrangle. A kind of rustic basement, about 10 feet high, formed the first stratum or story, and in this was the pipe from which the water issued: above that, the square form still continuing, four faces were presented to view, resembling not a little that tabernacle in the Rotunda at Rome. From each of the angles sprang the roof in a sloping concave line, resembling the diagonal line of a groined arch inverted, and in the opening thereof stood a lamb, a rebus of the founder's name, with its head towards Holborn-hill.

This goodly fabric, at a meeting of three ways, from each whereof it might be viewed with advantage, was suffered to stand some years after Cheapside, Aldermanbury, and other of the City conduits had been taken down. It is true that, for nearly half a century before the demolition of the former, the flow of water to almost all of them had been either totally interrupted or intercepted;



HINDERTON, CHESHIRE.—*Ground Plan.*

the reason of which was the plentiful supply of water from the New River.

Although the fountain or spring head in the City ceased to supply the inhabitants in the neighbourhood of Snow-hill, the water proved useful to those dwelling in the new streets, Ormond-street, &c.

This conduit, at the time of building the Foundling Hospital, was taken down, and the water conveyed eastward of Red Lion-street. In an old print of about the time of this alteration, the whole of the ground in front of the Foundling Hospital, which is now covered by Lamb's Conduit-street and the adjacent buildings, was broken-looking ground, similar to those spots which, three miles or so northward, now form the suburbs of the metropolis. When Sir John Hawkins saw this reservoir, the condition of it was filthy and neglected: there was, however, an inscription, to the following effect, upon a stone which formed part of the arched work:—

"On this spot stood the Conduit
Commonly called and known
By the name of Lamb's Conduit,
The property of the City of London.
Which was rebuilt in the year MD,CC,XXXVI.
By the said City, and altho so lately built,
Was taken down in the year MD,CC,XLVI.
At the request of the Governors and Guardians
Of the Hospital for the Maintenance
And Education of exposed and deserted
Young Children,
In order to lay open the way
And make the same more commodious.
The waters thereof are still preserved
And contributed for the public emolument
By building an arch over the way.
And this compartment is erected
To preserve the City rights and interest
In the said Ground, Water, and Spring."

A hostelry, which now presents a modern appearance, the sign of "The Lamb," on the east side, near the top of Lamb's Conduit-street, stands almost on the spot to which the conduit was removed from beside the Foundling Hospital, and in one of the gardens near is some old stone work which is probably the last trace of this relic of past times. William Lamb was a man who strove to do good in his generation, and the inscription above his tomb in St. Paul's was:—

"As I was—so are you:
As I am—you shall be.
That I had—that I gave,
That I gave—that I have.
Thus I end all my cost:
That I left, that I lost."

PUBLIC WORKS IN INDIA.—There is no truth, it appears, in the statement that there will be any rejection, or even postponement, of public works of general utility throughout the Queen's Indian dominions.

"THE BUILDER'S" LAW NOTES.

Bequest for Church Building Purposes. — A testator, by will, executed three months before his death, devised two freehold houses to trustees, upon trust, to sell and invest the purchase-money, and to pay the dividends to his wife for life, and after her death to make over and transfer the principal to the Society for the Enlargement, Building, and Repairing of Churches. This bequest was held to be void under the Mortmain laws. The Act of 1803, which modified the Mortmain Acts, intended that gifts to be protected should be for one church or chapel, and not a vague or general gift, to be applied to the enlargement, building, or repairing of churches or chapels generally.—*Church Building Society* v. *Coles.*

Landlord and Tenant.—The Courts will restrain a tenant from pulling down a house and building another when the landlord objects.—*Smyth* v. *Carter.*

Property Tax.—A tenant has a right to deduct the amount of property tax assessed upon and paid by him in respect of his landlord, although the landlord is not, in fact, liable to be assessed, and has, before the payment, claimed exemption, and that exemption has been subsequently allowed.—*Smatman* v. *Ambler.*

Lands Clauses Consolidation Act.—The throwing of a railway bridge over a yard belonging to a manufactory, and used for the preparation of colours (a process which required air and light) is taking a part of the manufactory under the powers of the Lands Clauses Consolidation Act, although no part of the soil itself is actually taken or touched.—*Pinchin* v. *London and Blackwall Railway Company.*

Condition of Sale.—Where particulars and conditions of sale, taken together, fully disclosed the nature of the property sold, and the purchaser might, previous to the sale, have inspected deeds referred to in the particulars and conditions, but did not do so, he was held bound to complete his purchase.—*Re Clapperton.*

Public Company.—Directors of a public company are trustees for the shareholders, and their private interests must yield to their public duty whenever they are conflicting.—*Re Coalbrook Railway Company.*

Public Health Act.—Plaintiffs were owners of fields on the banks of a river, with watering-places for cattle, and also had fishery rights in the river. The defendants, a local Board of Health, prepared to carry a sewer through the fields, with an outlet into the river, for the drainage of a neighbouring town. It was held that the plaintiffs were entitled to restrain by injunction the defendants from constructing the sewer without their written consent.—*Oldaker* v. *Hunt.*

Coast Rights of Crown.—In the absence of all evidence of particular usage, the extent of the right of the Crown to the seashore, landwards, is *primâ facie* limited by the line of the medium high tide between the spring and the neap.—*Attorney General* v. *Chambers.*

HINDERTON, CHESHIRE.

HINDERTON, of which we give a view and ground-plan in our present number, is the residence of Mr. Christopher Bushell, and has lately been erected from the designs of Mr. A. Waterhouse, of Manchester. It is situated on rising ground above the village of Neston, and about two miles from the Hooton Station of the Chester and Birkenhead Railway.

The local red sandstone is the material employed in the house, terraces, offices, stables, and lodge; the house itself being in addition lined with brickwork.

The principal apartments are finished in oak and pitch-pine; and the floor-beams above, instead of being concealed by plaster, are moulded, and supported on corbels of Caen stone.

The hall, paved with Minton's tiles, has gallery on two sides leading to various rooms on the chamber-floor, and is open to the roof. The basement story, which is lofty and surrounded in part by an open area, contains a billiard-room, servants' hall, and other boarded apartments.

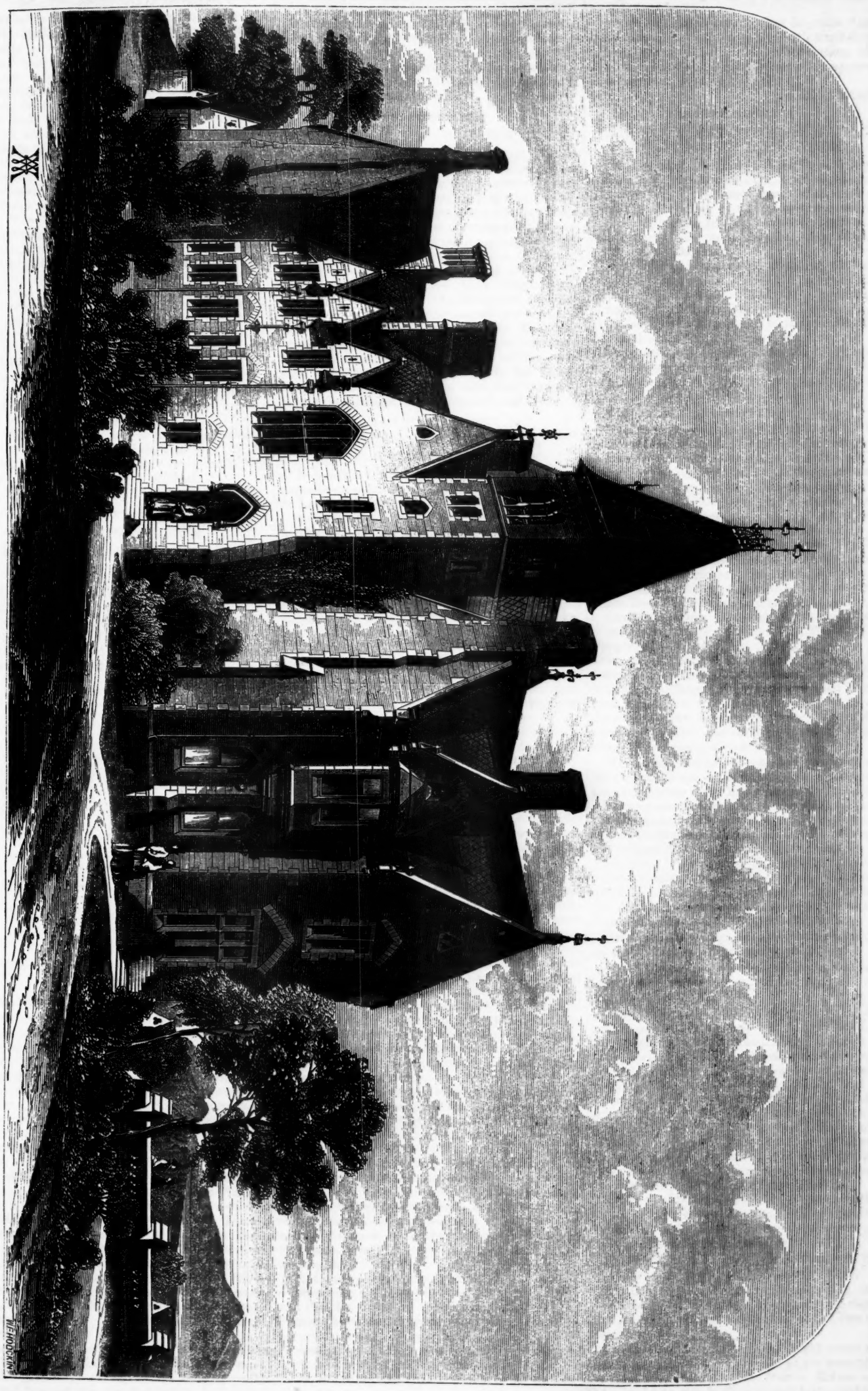
From the tower is obtained an extensive prospect, embracing the estuaries of the Mersey and Dee, and the Denbighshire hills.

Messrs. Haigh and Co. of Liverpool, were the contractors of the work. Messrs. Aspinwall and Monkhouse, of Manchester, were employed as internal decorators.

Reference to Plan.

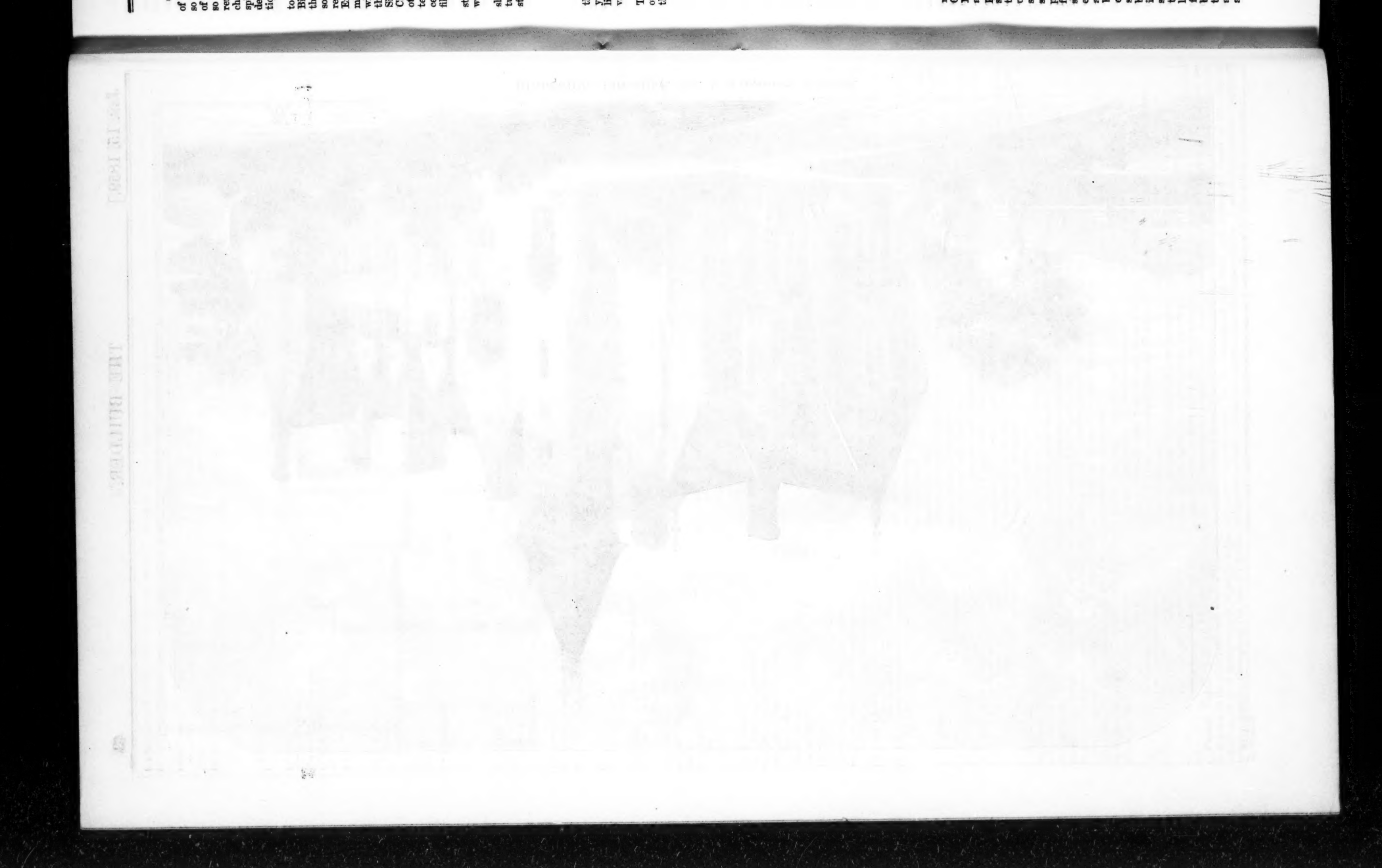
A. Porch.
B. Vestibule.
C. Hall and staircase.
D. Drawing-room.
E. Library.
F. Dining-room.
G. Study.
H. Lavatory, &c.
I. China.
K. Butler's pantry.
L. Store-room.
M. Corridor.
N. Kitchen.
O. Scullery.
P. Larder.
Q. Kitchen-court.
R. Coals.
S. Wood.
T. Ashes.
U. Conservatory.
V. Terrace.

THE TIMBER DUTIES.—A large and influential meeting of the inhabitants of Sunderland has been held for the purpose of taking steps to obtain a total and immediate repeal of the existing timber duties. A series of appropriate resolutions were adopted to that end by the meeting.



HINDERTON, CHESHIRE.—MR. A. WATERHOUSE, ARCHITECT.

W. E. HODGKIN



LONDON CHURCHES.

ST. HELEN'S, BISHOPSGATE.

THE noble efforts displayed by the authorities of St. Michael's, Cornhill, first in sacrificing so large a space of ground in the erection of the beautiful porch, which has called forth so much admiration, and further in the entire renovation in so costly a manner of the body of the church, leads us to entertain hopes that the same spirit may be diffused amongst other churchwardens of some of the more venerable relics of antiquity in this our dear old City of London.

And, sir, I would wish to call your attention to that especially venerable structure, St. Helen's, Bishopsgate, apparently fast falling into decay, the Tudor roof of which covers in the remains of some of our noblest citizens: need I bring to your remembrance Sir Thomas Gresham? The Royal Exchange and college which bear his name remind us of his philanthropy, and can we do otherwise but revere the place of his sepulture and the names of Sir John Crosby, William Hollis, and Sir Andrew Judd, names so well remembered in City annals for deeds of charity, with numbers of others possessing historical and antiquarian interest, some decaying away, and scarcely discernible through the dirty yellow glass which fills the windows.

What can be done to save this time-honoured structure, and to restore it in a measure to somewhat of its pristine grandeur?

With due respect, let us hope the lethargic sleep of its worthy churchwardens may be disturbed, and for a morning walk tread in the footsteps of their brethren of St. Michael.

NINETEENTH-CENTURY CITIZEN.

TITHE COMMUTATION.

MR. WILLICH, the actuary, writes to us to say, that each 100*l.* of tithe rent-charge will, for the year 1859, amount to 108*l.* 19s. 6¼d. which is a little more than 3 per cent. above the last year's value.

The following statement, from his "Annual Tithe Commutation Tables," will show the worth of 100*l.* of tithe rent-charge for each year since the passing of the Tithe Commutation Act, viz.—

For the year 1837	£98	13	9¾
1838	97	7	11
1839	95	7	9
1840	98	15	9½
1841	102	12	5¼
1842	105	8	2¾
1843	105	12	2¼
1844	104	3	5¼
1845	103	17	11¼
1846	102	17	8¾
1847	99	18	10¼
1848	102	1	0
1849	100	3	7¾
1850	98	16	10
1851	96	11	4¾
1852	93	16	11¼
1853	91	13	5¾
1854	90	19	5
1855	89	15	8¾
1856	93	18	1¼
1857	99	13	7¼
1858	105	16	3¾
1859	108	19	6¼
23)2,287	2	0½	
General average for 23 years	£99	8	9¼

FALL OF A SHOP AT LIVERPOOL.

MISFORTUNES never do come single. The last new accident is the fall of a large draper's shop in Great George-street, Liverpool, extending from 113 to 115 inclusive, and the burial of customers and shopmen in the ruins. The occurrence took place on Tuesday. Three female customers, a shopman, and a workman were dug out quite dead; two workmen, sent to the hospital; and three or four others, together with more women customers, not so seriously injured, were able to go home of themselves. The draper had recently added to the back part of his premises, which have an extensive frontage and two entrances, like two distinct shops, a large bazaar, lighted from the roof, and extending backwards to Rathbone-street. During a portion of the alterations the shop was closed, but had recently been re-opened. Three men were engaged in taking down the party wall in the attic, so that the shop might be joined to the new bazaar behind. In doing this they placed the brick-work, it is said, on the floor of the old premises, though strictly ordered not to do so. In the afternoon the top floor gave way, and the fabric being loosened, it came down with a terrific crash to the floor below. This did not hold the falling mass, but also gave way, adding to the weight, which then fell through into the shop below, and carried all down into the cellar, burying people, stock, and fixtures in the rubbish.

It is stated that on the premises being examined, it was seen that a party-wall, in which the beams of the flooring rested, was only 4½ inches thick, without any bonding to the adjacent party-wall of equal thickness. This portion of the premises is abou fifty years of age, and it was evident that this party-wall had buckled or collapsed through the great weight above. The new building behind was quite firm and uninjured.

IMPROVEMENTS AT BOSTON, U.S.

IN a street called Franklin-street, at Boston, very extensive business improvements have been effected within the last twelve months: in fact, Franklin-place, once the residence of the wealthy and the fashionable of the city, has all of a sudden been converted into a street of commercial palaces, which are extending throughout various thoroughfares in connection with it. Mr. G. J. F. Bryant, architect, has planned no less than about forty-five first-class stores here in a single year! Fortunate Mr. Bryant! The *increase* of valuation in the real estate of Franklin-street has been estimated at no less than 2,500,000 dollars. Both sides of the street are occupied with the new stores, and one block alone, forming a portion of the south side, extends in one uniform façade, 220 feet in length, 108 feet in depth, and five stories in height, in addition to the basement and attics.

THE REVIVAL OF MEDIEVAL ARCHITECTURE.

IT is not my intention to be led into a newspaper correspondence with Mr. Street, who appears to have misunderstood the purport of my letter.

I must state, however, that he is mistaken in supposing that my views are at all singular or peculiar to myself, as the article in the *Guardian* to which he refers proves, for it was not written by me. In contradicting my statement respecting "Early Italian Gothic," he gives a list of Italian buildings, but carefully avoids giving a single date, without which his arguments are worth nothing.

I may say that I do not know all the Italian buildings he mentions, but I am well acquainted with many of them, and have careful drawings of numerous details by an experienced artist, made under my own eye, and according to my own personal directions, on the spot.

I never said I wished architects to go to Rome and the East by way of Brittany, Anjou, &c. I only wished to point out, as a matter of history, which there is evidence to prove, that the principles of vaulting came to us by that route from Byzantium. This, too, was introduced in my letter when I was speaking of the different modes of vaulting being prominent distinctions between English and French Gothic, and had nothing whatever to do with a modern architect's travels.

I did not express as my wish the restriction of the studies of architects in any measure; let them study the buildings of the whole world, as far as they have the opportunity, but that is no reason for importing details from Lombardy, and introducing them into English buildings: study and importation are different things. Let them begin their study at home, and when they have mastered English Gothic they will be better able to make use of foreign details. I said that when they did copy, it was better to take from those districts with which our ancient architects were in communication, and not go to those countries with which they had no intercourse, as the results must lead to incongruous mixtures.

It is a mere perversion of my words to suppose that I intended to point out the hospital at Angers as the one type which our English architects followed; I said no such nonsense. I merely said it was the most advanced building of its date that I have met with, and had peculiar historical circumstances connected with it. Let Mr. Street point out an earlier dated example of which lightness and elegance are so marked a characteristic; the pointed arch which he lays such stress upon is no criterion, as St. Front, of Perigueux, itself has this form of arch fully developed.

This, too, reminds me that Mr. Street quietly assumes that the colony in Perigord was Venetian, and that St. Front is copied from St. Marc, at Venice; but this is mere assumption, and not so probable as that it was a Greek colony from Byzantium, and that both St. Front and St. Marc are copied from the same type; and it is by no means certain that St. Marc is the earliest of the two.

It is evident that Mr. Street does not understand the distinctive principle of French and English vaulting to which I have referred; and it is impossible to explain it, without buildings or models to refer to.

Mr. Street may sneer at what he calls "antiquarianism;" but the copying, both English and foreign examples, without understanding their history, has been one great cause of many recent failures which we have to deplore.

J. H. PARKER.

THE LATE CATASTROPHE AT THE POLYTECHNIC INSTITUTION.

ON Thursday afternoon the adjourned inquest on the body of Emma Pike, aged eight years, who lost her life in consequence of injuries sustained by the falling of the geometrical staircase at the Polytechnic Institution on the night of the 3rd instant, was resumed before Mr. Wakley, coroner for Middlesex.

Mr. Sleigh, the barrister, appeared to watch the proceedings on the part of the directors of the Institution; Mr. Collier, M.P. Q.C. appeared for the architect of the building (Mr. Thomson); Mr. Mathews, solicitor, on behalf of the parents of the deceased child; Mr. Goring, solicitor, for Mr. Bedford, the mason who fixed the iron-castings to the staircase; and Mr. Hughes, jun. represented the interests of Mr. Pepper, the late general manager of the Institution.

The jury having been sworn,—

The Coroner said he felt himself to be in a little difficulty arising out of the course of events which had taken place since the last day on which the jury had met. On that occasion it seemed to be understood that the deceased had lost her life in consequence of the accident to the staircase on the previous Monday. An adjournment was then ordered, to procure some professional assistance, and Mr. Nelson and Mr. Eales had been requested to make an inspection of the scene of the disaster. He found, however, on going home that day at two o'clock, a communication from Mr. Nelson, in which that gentleman inclosed the names of a list of witnesses to be called, including Mr. Bedford, Mr. Thomson, Mr. Pepper, Mr. Hopper, Mr. Pratt, and other persons. It was impossible, however, for him (the Coroner) to summon those witnesses at such short notice; and, therefore, he would be glad to learn from Mr. Nelson whether he was ready to produce his report now, or whether it would be necessary to have another adjournment, before he could be in a position to do so.

Mr. Nelson said he was not as yet prepared with his report. Since he had made his inspection of the place, some facts had come to his knowledge with reference to the state of the staircase before the iron treads were put in; and in consequence of that circumstance he had requested the Coroner to summon the witnesses, whose names he had given him. He believed that all the parties to whom he referred were now present. The course which he ventured to suggest had been tried at the Guildford-street and Tottenham-court-road inquiries, with the most convenient results.

The Coroner.—Why, we were a fortnight sitting on the Tottenham-court-road inquiry.

Mr. Nelson.—I fancy we should have been much longer had we not adopted the course I now suggest.

The Coroner said that, in his opinion, the suggestion of Mr. Nelson was not susceptible of the favourable construction which that gentleman put upon it, and that the result might be to defeat the ends of justice. The question, however, should be left to the jury, and if they wished that the witnesses should be examined before Mr. Nelson gave in his report, he should offer no objection; at the same time, he confessed that, in his opinion, the more convenient course would be to adjourn the inquiry until the morning of some day next week, when they could commence the inquiry at an early hour, and finish on the same day. He would be glad to know from Mr. Nelson, whether, supposing they were able to take the professional evidence at once, he would be prepared to give his evidence and submit his report then?

Mr. Nelson said he could not do that, but that he would be quite prepared on Tuesday next.

Mr. Collier said, as he understood the case, Mr. Nelson did not wish to give in his report until he had heard the evidence of one or two important witnesses.

The Coroner repeated that he would leave the matter in the hands of the jury; at the same time his own opinion was, that Messrs. Nelson and Eales ought to give in their report first, and then give their evidence.

After some discussion, in the course of which

the jury expressed themselves averse to repeated adjournments.

A Juror inquired whether the Coroner had received any report from the surveyor.

The Coroner.—I have not.

Mr. Mathews inquired whether there was any necessity for a written report at all.

Mr. Sleigh said that the directors had no object in view but a desire to facilitate the inquiry as much as possible.

Mr. Eales said he had drawn up the outline of a report, but that he was not prepared to present it at that moment, as he understood that some fresh evidence was likely to be produced.

Mr. Mathews said the surveyors had gone over the premises, and had had time to form their opinion as to the cause of the accident. He could not see what assistance they required to arrive at a conclusion whether the staircase was or was not constructed upon proper architectural principles.

The jury having expressed their desire to hear further evidence before adjourning, several witnesses were called.

Mr. John Langley King examined.—I reside at No. 56, Wells-street, Oxford-street, and am lecturer on science to the Institution. I am neither a shareholder nor a proprietor in the Institution. I witnessed the accident which occurred at half-past ten o'clock on the night of the 3rd of this month. I was on the middle landing at the foot of the stairs that fell. I heard a slight noise, and saw the upper part of the railing yield. The whole staircase descended at once, and fell on the one beneath it, breaking the latter away with a loud crash, and ultimately falling with a very dull sound into the well. I was not thrown down. I should fancy that forty persons were on the upper stairs when they fell. The gas was cut off, and all was dark. I then ran to my room and obtained candles and tapers.

Mr. Nelson suggested whether Mr. King could give any evidence as to the state of the staircase.

The Coroner said he did not think professional gentlemen should act the part of advocates.

Mr. Nelson observed that if the Coroner meant thereby to infer that he (Mr. Nelson) was at all disposed to act as an advocate, he would beg permission to retire from the room. He had been engaged in many inquiries similar to the present, and it had never been urged against him that he had been influenced by any interested motive. From hearsay evidence he had been led to believe that there were defects in the staircase before the accident occurred, and it was his duty to ascertain what grounds existed for those rumours. In the exercise of what he conceived to be his duty, he had ventured to suggest a question to the witness, and he did hope that credit would have been given him for sincerity of motive.

The Coroner said that Mr. Nelson was wholly mistaken in supposing that he intended to impugn his honourable conduct in any respect. His only object in stating that the architects should not be considered as advocates, was to prevent Mr. Nelson or Mr. Eales supposing that they were expected to act in that capacity. It had often been his lot to act with Mr. Nelson, and he was bound to say he had never met a more clear-headed, honourable, or straightforward witness.

Mr. Nelson expressed himself quite satisfied with this explanation.

Mr. King's examination resumed.—I have been here six or seven years, and the only thing I ever saw done to the stairs was putting down the iron treads. I think this alteration was effected about four months ago. I made no complaint about the stairs, and I thought them quite safe, or I should not have gone up and down so many times. Had the audience been going up, instead of coming down, I should have followed them. I do not know who directed the alterations to be done.

Mr. T. Bedford, of 256, Oxford-street, mason and builder, examined.—I was employed by Messrs. Cottam and Hallen, of Oxford-street, in March last, to estimate labour, &c. for letting-in iron-work in the steps of the principal staircase. At that time I was engaged doing work out of town, and I intrusted the matter to William Hopper, my foreman. I did not make any inspection of the staircase. There was no written order or contract between myself and Cottam and Hallen. The labour was found by me, but I made no inspection even after it was done, and did not see the work until after the accident. It was done under the inspection of the architects of the institution and the foreman of Messrs. Cottam and Hallen. (Letters from Messrs. Cottam and Hallen to witness, containing instructions with reference to letting in the castings were put in.) It was on the 19th June that the men commenced the work. My contract was merely for labour (in cutting away the steps) and supplying cement.

William Hopper, of 10, John-street, Marlborough-road, Chelsea, mason, examined.—I am foreman to the last witness. In the latter part of March last, I was employed to let in an iron tread into the staircase as a pattern.

Mr. Sleigh stated that the steps to which the witness referred were now standing.

Examination resumed.—I made an engagement with Cottam and Hallen's foreman to let in the castings to the staircase which fell. There were sixty-four steps done in the winding staircases. There was no stipulation as to the length or weight of the treads, or as to the depth of the cutting, except that the latter were to be level with the steps. The depth was to be about three-eighths of an inch thick. I do not know the weight of the treads. There was no stated time in which the work was to be finished. I did not view the work as it proceeded; that was left to Mr. Ellis. (The iron tread of one of the steps was here produced, and found to weigh a half-hundred weight.) I made an objection to Mr. Thomson, the architect, with reference to the long steps. I had partly let a tread in, and found it was going too far. I considered it would weaken the step very much, and said to Mr. Thomson, "If I go on cutting the step in this way, I will have it fall in two or three pieces." Mr. Thomson said he would have some of the flange work cut away. He then sent for Mr. Ellis, and after they had had a consultation, they agreed to cut away some of the flange, and sent for a man for that purpose. The man came and cut away the flange in the engine-room of the Institution. Mr. Thomson said he did not think there would be any danger then, and he added he would have the pattern altered before the other treads were cast. There was nearly an inch of the flange cut off. The circular steps were six inches deep. I did not see Mr. Thomson afterwards on the subject, or while the short steps were being altered.

By Mr. Collier.—I am positive that the flange was altered by direction of Mr. Thomson, in the manner I suggested. The labourers were employed by the day and not by piece-work. Three men were employed on the short steps.

George Pratt examined.—I am a stonemason, and was in the employ of Mr. Bedford when the steps were altered. I think I was at work for him in the month of August. I was sent by Mr. Bedford to let in the iron steps into the treads. Before I commenced I went to Mr. Ellis, and asked him at what distance from the wall he would have the irons let in. He directed that six inches space should be left. I saw Mr. Thomson inspecting the work several times a day during its progress. He told me to be as careful as I could, and let them in in a workmanlike manner. I made no complaint to any one, for I considered the alteration would make the steps stronger than they were before. I think I was a fortnight and two or three days at the work. There were, I believe, four flights of steps of seventeen or eighteen steps each. I cut into the steps about three-eighths of an inch. The average of the surface cutting was about half an inch. I had never done such a job before; but I have often put in stone treads an inch or an inch and a half thick. None of the other men employed complained of any danger or weakening of the steps. I was not compelled to have the work done by a given time. My instructions were to take my time and do the work well, and I did it well. The weight of each step is I think about 46 or 48 lbs.

By Mr. Collier.—As the iron-work was buried in cement, my impression was that the stairs would be strengthened by the job.

By a Juror.—The interstices in the iron trellis-work were filled up with Portland cement, which is very strong.

By Mr. Mathews.—In my opinion the shells which I saw in the stone of the landing would weaken it.

Mr. Mathews.—How can you reconcile the fact, that the steps all broke away at the place where the iron was inserted, with your impression that the alteration tended to strengthen the staircase?

Witness.—Well, that I cannot get at exactly.

By Mr. Collier.—The top stone (the landing stone) did not break off where the iron was let in, but at another place. The top stone is very heavy, and if it broke it would tend to pull down the others in succession.

The Foreman.—Have you formed any opinion as to the cause of the accident?

Witness.—No; I have not. All I can see is the defect in the landing; and if it gave way first, my opinion is, it would take the rest with it.

In reply to questions put by the chairman, the witness stated that the "joggle joint" had never been run in properly by the persons who first fixed it. He also stated that when he first saw the staircase, it was quite sound, with no decay, except that caused by friction.

Mr. Sleigh.—The corresponding spiral staircase was treated in precisely the same manner, was it not, and it is standing at this moment perfect and entire?

Witness.—I suppose it is.

By Mr. Eales.—I saw no crack in the landing, except in a place where it was worn away and filled up with Keene's cement, or something of that sort.

Mr. C. H. Smith, mason and sculptor (one of the gentlemen appointed by the Government to select the stone used in the new Houses of Parliament), was the next witness examined.—I made an inspection of the staircase by request of Mr. Thomson before it was altered. Mr. Thomson applied to me in consequence of having heard that I had acted in a similar capacity with reference to the St. Catherine's Docks. I wrote him a letter after I had made my inspection. Mr. Thomson was not with me, neither were any of the directors; but I paid my shilling on three occasions, and no one knew I was making the examination. I suggested that the staircase should be altered in the same manner as I had done the staircase at St. Catherine's Docks, namely, by cutting away about an inch and a half of the stone, and letting in Yorkshire stone (a harder substance), using plaster of Paris as cement. I do not know what the difference would have been between the cost of my plan and that ultimately carried out in iron, as I do not know the price of the iron. I gave Mr. Thomson an estimate of the cost of my plan for a portion of the steps, but I do not remember what the price was. When the stairs were altered by Mr. Bedford I looked at them just by way of curiosity, but I did not think there was anything to excite apprehension. I was not aware of the flanges and brackets. The steps were worn (in some cases as much as three inches) when I first saw them, and then I thought it was necessary to do something to strengthen them. The stairs I operated upon at St. Catherine's Docks were the principal stairs, and they have lasted, as strengthened, about two and twenty years.

By Mr. Sleigh.—With the exception of the wear and tear, caused by friction, I saw nothing the matter with the stairs.

To the Coroner.—I have made an inspection of the staircase since the accident, and my opinion is, that the origin of the accident commenced at the top landing, and proceeded downwards. I have always observed that in a well-constructed stone staircase every step should bear its own weight, and whatever might be upon it, wholly independent of any other step. In examining the portions that remain in the wall here, I could not observe one instance among the broken steps of their having been originally imperfectly fixed in the wall. Finding no defect in the staircase itself, I proceeded to the upper landing. The first thing that struck me there was the remnant of the broken landing stone, with several large fossil shells in the fracture. This convinced me that the landing was cut out of a block of stone across the grain. The length of the slab or block was about 6 feet wide, its thickness 4½ inches, and its weight 4 or 5 cwt. I searched among the *débris* of the broken piece, and there I found the imprint of the fossil shells. I perceived that the piece had what is called a "she joggle," and that the upper piece was also a "she joggle" instead of a "he," showing that there was no proper joint. I also saw there was a groove, 10 or 12 inches long, in which there was no cement whatever. The joint being defective, and the traffic on the slab causing a constant vibration, there was quite sufficient to break the landing at the weak point. I do not think the fracture could have been of long standing, as it is tolerably clean. The fracture would have been visible, if it had been looked for, but not by a casual observer. My firm belief is, that the accident originated in the fracture, but that if there had been a proper "joggle joint" it would not have occurred. That imperfection was in the original construction of the building, and is to be traced to the carelessness of the workmen. Portland stone is very variable in its strength, and it is very difficult to get even two pieces from the same block of the same strength. The fossils which I found are a species of extinct oyster.

At this stage of the proceedings (it being then half-past six o'clock), the jury expressed their wish to adjourn, and the inquiry was accordingly further adjourned to two o'clock in the afternoon of Tuesday next, to be held at the Institution.

GIVE US WATER.

"Water, water everywhere, and not a drop to drink."

SIR,—Now that there is so much agitation about drinking-fountains for pedestrians, can you not put in a good word for the benefit of lady travellers by rail?

A few days since at the London terminus of the Brighton railway a glass of water was not to be had in the first class waiting-room, and, on inquiry, it was said that "the glass, having been broken, had not been replaced." Why had it not? Doubtless the lady who broke it left the necessary amount for procuring another. Was it then forgetfulness or carelessness on the part of the attendant? or was it from an understanding with the suppliers of refreshments, in order to oblige persons wishing to allay their thirst to pay for the luxury? At other stations on the Brighton line, if not elsewhere, the same want prevails; and although the company's servants are extremely civil and obliging, and will always fetch a passenger the coveted beverage, people do not like to give avoidable trouble, and, therefore, either endure the discomfort or else go into the refreshment-room and buy what they do not want, for the sake of begging what they do.

All honour to Melly and other worthy men, but even should a public drinking-fountain be erected outside every railway station, the interior accommodation suggested will still be a necessity; for I suppose it would scarcely be considered seemly that a lady, on alighting from her carriage, should stop, whatever her willingness might be, to quench her thirst with a draught of Adam's ale from the iron beaker of the million.

A TRAVELLER.

CHURCH-BUILDING NEWS.

Colchester.—The chancel and north chapel of St. Giles's church, in this town, are about to be re-seated; and the western portion of the nave, hitherto unused, thrown into the body of the church, by removing the present gallery to the west wall, and by entirely removing the lathed and plastered partition. A two-light decorated window will be inserted in the western extremity of the south wall. The architect is Mr. H. W. Hayward, of Colchester, and the contractor, Mr. Start, of the same place.

Chislehurst.—The restoration of the tower, spire, and bells of the parish church is now effected. The fire in 1857, which originated in the belfry (from the supposed carelessness of one of the ringers) entirely destroyed the spire, bells, clock, and everything within the tower, and greatly damaged its windows and walls, which, accordingly, at the restoration, had, to a great extent, to be rebuilt. The new peal of eight bells has been cast by Messrs. Warner, of London. The tenor weighs over 17 cwt., and sounds E natural (third space in the bass stave), the rest completing the octave. The whole work of restoration has been under the direction of Mr. G. B. Wollaston, architect, resident in the village. The builder was Mr. Grammar, of London. The clock was made by Mr. Dent, of London. The organ is placed in the south aisle, under a stained glass window, in which are three musical designs. The builder of the organ was Mr. Rust, of Chelmsford.

Claverton (Bath).—The new church of the village of Claverton has been opened for divine worship. It has been rebuilt, as nearly as circumstances would admit, in the style (principally Early English) of the former building. By an additional bay of building, and re-arrangement of the seats, fifty new sittings have been added to the former insufficient accommodation. The architects were Messrs. Manners and Gill, of Bath.

PROVINCIAL NEWS.

Norwich.—The Norwich papers contain the prospectus of a new corn-exchange company, who propose to raise a capital not exceeding 25,000*l.* in 25*l.* shares and by donations, for the erection of a new corn-exchange upon the site of the old one, which the company propose to extend as far as Little London-street and the passage next the entrance to the artists'-room. The area of the new hall will exceed 12,000 square feet, being an extension of 5,000 feet as compared with the present building; and in the interior it is intended to place forty pay-boxes or counting-rooms, for the use of merchants and others. There will be two entrances, one from Exchange-street and the other from Little London-street; the latter being the nearest point of entry from the Cattle-market and the Eastern Counties station. A new feature will be the addition of an auction-mart. About 14,000*l.* have already been subscribed for in shares and donations, and as soon as this sum is increased to 20,000*l.* the directors will at once proceed to carry out the undertaking.

Cardiff.—At Quarter Sessions, the committee appointed by the last court at Swansea have reported in favour of the plan suggested by the county surveyor, for widening, at a cost of 2,000*l.* the bridge over the river Taff, which separates the town of Cardiff from the extensive western suburb of Canton; also for improving the approaches from a gradient of 1 in 14 to 1 in 30. A few days before, a scheme had been suggested by Mr. Corbett, on behalf of the trustees of the Marquis of Bute, for the construction of a new stone bridge, 50 feet south of the present one. This announcement having been made, a plan of the proposed structure was produced by Mr. Alexander Bassett, C.E. and submitted to the Court. The bridge is to consist of four elliptical arches, each 40 feet span, carrying a flat roadway of 30 feet in width, with approaches almost level on either side.—— At a recent meeting of the Local Board of Health, the clerk announced that the committee for examining the tenders for the erection of the Custom-house bridge had recommended that Mr. Warne Edwards's for 1,498*l.* be accepted, and that the bridge be formed all of iron. The following persons sent in tenders:—

Webb and Sons, Birmingham ...	£1,700
D. Jones, Cardiff	1,600
D. Harris, Cardiff	1,572
W. V. Edwards, Swindon.....	1,498

The proposition was carried.

Hereford.—New offices have been erected for the local *Times* newspaper, in Maylord-street. The building, which is in the Italian style, has been erected from the design of Mr. James Williams, of Hereford, architect, and carried out under his supervision. The front of the wall is built with patent brick, and decorated with Bath stone dressings. The basement floor comprises hall, kitchens, cellar, store-room, coal-house, and closets, &c. The ground-floor contains an entrance-hall and entrance-passage, publishing-office, counting-house, and paper-room, the whole of which are lofty and commodious. The first floor contains reporters'-room, editor's-room, private offices, and library, the communication to which is through a spacious passage well lighted from roof. The second floor comprises sitting-room and three bed-rooms, closets, &c. The flights of stairs ascend from the basement through the entrance-hall to the roof, communicating with the observatory, which is inclosed with balustrades, and has a leaded floor, and flagstaff. Extensive alterations and additions have also been made to the machinery-room, composing-room, and boiler-house. Over the machine-room has been erected a new department for general printing, with octagon roof. Between the publishing-office and the machinery-room is a glass partition in three divisions, with semi-circular heads. Two enriched cast-iron columns are fixed in the partition to support the bressumer over. The openings to the street on the ground-floor comprise doorway, gateway, and three double windows, with semicircular heads of Bath stone, enriched with ornamental carved finish and cut lettering describing the several departments. The window-heads are supported by bronzed cast-iron columns in the depth of the openings. The first-floor offices and principal passages are lighted by five windows, the centre window having two columns. Round the ground-floor and second-floor centre windows runs a moulded label with finished carving of goats' heads. The whole of the front windows are adorned with stained-glass borders, and the lower sashes of each window with star-enamelled glass, describing the several departments. The plinth, brackets, under columns, string courses, ornamental work to door, scrapers, cornices, enrichments, coping and chimney tops, &c. are of dressed Bath stone. An ornamental arched turret erected over the centre windows has a balustrade, and is surmounted with numerous enrichments, finished with ball, gilt shaft, and weather-vane, &c. On each side of the turret, fixed on pedestals, are statues representing the seasons, Spring, Summer, Autumn, and Winter, executed by Messrs. Austin and Seeley, of London; three of them from original designs of their own, and that representing "Autumn" from a model by Bien'ami, of Rome. The pavement about to be laid down in front of the building is composed of granite from the Cheesewring Co.'s quarries, at Liskeard, Cornwall. The whole of the building and offices cover an area of 60 feet by 70 feet, and the height from the ground to top of the weather-vane is 65 feet. Messrs. E. Morgan and J. Price were the builders of the edifice.

THE ARCHITECTURAL ASSOCIATION.

THE ordinary meeting of the members of this Association was held on Friday evening last, at Lyon's-Inn Hall. The chair was taken by Mr. J. Norton, the president.

The minutes of the last meeting having been read and confirmed, Mr. Robert Walker was elected a member of the Association.

Mr. Herring (honorary secretary) announced that at the last meeting of the committee the following resolutions were agreed to:—

"1. That the committee of the Architectural Association, considering that any project having the advantage of the profession in view is worthy of their support and co-operation, recommends the Association to remove to the new premises in Conduit-street, Bond-street, belonging to the Architectural Union Company.

2. That this committee recommends the Association to agree to the proposition of the Architectural Union Company to remove to their premises in Conduit-street on the following terms, namely, at a rental of 30*l.* per annum for the western gallery and committee-room on every Friday evening throughout the year, to include fire, light, attendance, and furniture, with the use of the larger gallery for three evenings in the session, for the purposes of their *conversazioni*.

3. That the Architectural Association agrees that subscriptions shall be paid, or season tickets taken, by its members, to the number of at least fifty, for the next Architectural Exhibition, in consideration of the Architectural Association having exclusive entrance to the galleries for one evening during the approaching Exhibition for a public meeting."

A long and desultory debate ensued on the consideration of these resolutions, and also of certain queries sent to the honorary secretary. The object of the queries was to elicit information with reference to the present income and expenditure of the Association; also as to the advantages which were likely to accrue by removing from Lyon's-Inn Hall to the new building of the Architectural Union Company in Conduit-street; likewise what would be the probable income of the Association if it removed to Conduit-street; and what would be the probable expenses entailed upon the Association consequent upon such removal.

A letter was then read from Mr. Edmeston, the honorary secretary to the Architectural Union Company, stating that the directors, having received a communication from the Architectural Association, had agreed to let the Association have the western gallery and a committee-room on every Friday evening during the year, with the free use, for one evening, of the gallery in which the exhibition would be held, at a rent of 30*l.* per annum. Mr. Edmeston also expressed his conviction, that if, at the end of the year, it should be found that the Association could not conveniently pay 30*l.* a year, the directors would reduce the rent, so that the expenditure of the Association in that respect should not exceed that now paid for the use of Lyon's-Inn Hall.

Mr. Cates said he wished to know what practical advantage the Association would derive from changing its quarters to Conduit-street. He was of opinion that the expenditure of the Association was at present rather more than it could afford to pay, although (as in the case of the printing) some gratuitous assistance was given it. If, then, they were to remove to so aristocratic a neighbourhood as Conduit-street, they could scarcely be expected to avail themselves of gratuitous assistance. It occurred to him that if they removed from Lyon's-inn-hall, they ought to pay all their bills like the other Associations which might migrate to the new building.

Mr. Rickman also was of opinion, that it would be inexpedient to remove until they saw their way clearly to pay the whole of their expenses without extraneous assistance. It seemed to him that Lyon's-inn-hall was more central for the majority of the members than Conduit-street. Moreover, it should be borne in mind, that if they went to Conduit-street, they must conform to the expenditure of that aristocratic neighbourhood.

Mr. Herring said that he had frequently received communications from persons to whom letters of invitation to attend the *soirées* of the Association had been forwarded, stating that they did not know where Newcastle-street was. This circumstance led him to the conclusion, that the obscurity of the *locale* had occasioned them to lose the presence of a great number of visitors. The communications and applications received by him on the occasion of each *soirée* varied from six to twelve; and if they were to be regarded as indices of the numbers received by other members, and that such applications were multiplied by

120, the meeting would be enabled to appreciate at once the actual loss of visitors arising from this cause alone. If, on the contrary, they were to remove to Conduit-street, there could be no difficulty in finding them, as all the Architectural Associations would be under one roof.

The resolutions, as passed by the committee, were then discussed *seriatim*, and were ultimately approved without a division.

It was afterwards resolved, to postpone the next *soirée* until the Association had obtained possession of its new quarters in Conduit-street.

In consequence of the protracted nature of the discussion, the remaining portion of a paper read at the previous meeting, "On Timber Framing," was postponed until the meeting of Friday, the 21st instant.

EQUALIZATION OF THE POOR-RATES.

THE richer a parish is—the more it is occupied with high-class dwellings, and hence the better able to pay poor-rates, and assist parishes in which the poor are crowded—the less poor-rates does that rich parish pay; till at length, if there happen to be no poor at all within the limits of that particular parish, it gets rid of poor-rates altogether. The first axiom that the poor be helped by the rich is thus completely subverted, and in national practice, as but too much also amongst individuals, it is the poor chiefly who aid the poor. The sooner arrangements are made to give a fair share of this responsibility the better. The Metropolitan and County Association for the Equalization of the Poor-rates has issued a circular explanative of their position and of what they propose to do. The circular is prefaced by a powerful list of vice-presidents, among whom are many members of Parliament. Their position, it appears, is now a very strong one. As a merely metropolitan association, last session they brought in a Bill to Parliament for the equalization of the metropolitan poor-rates, but they found so strong a feeling amongst the members of Parliament in favour of a general Act applicable to the whole country, that they withdrew the Bill, resolved themselves into a general association, and prepared a scheme applicable to the whole country, wherewith they intend to return to Parliament in the coming session. Whether the object be effected in the precise manner indicated, the association do not much care; but they have made a specific, practicable, and simple proposal, in order to show how easily the object *can* be effected. They propose that a Board be appointed by the ratepayers in *each separate county*, to whom the dispensation of the poor fund to all the parishes and unions of that county shall be given, the equalization being left to that Board; and although a complete equalization, as extending to the whole country, may not thus be effected, the plan shows what can be readily done towards the object in view without exciting hostility from the fear of centralization: on the contrary, the association argues, the central Poor-law Board itself might even thus be dispensed with. Whether that be desirable or not, however, assuredly, the creation of a Middlesex Board for the equalization and dispensation of the poor-rates would be a great boon to the metropolis, and a step towards common sense in legislating.

STONE STAIRS.

THE late disastrous accident at the Polytechnic reminds me of a similar one which occurred in the Commercial Buildings of this city (Cork) two years since, but happily without loss of life. The staircase leading from the vestibule to the great hall suddenly fell, the Portland-stone steps breaking off within four or five inches of the wall into which their ends had been inserted.

These steps had undergone a similar process to those at the Polytechnic, having had plates of cast-iron inserted in the edges of the treads, about 4½ inches wide. As they had previously been somewhat worn, these plates extended to within 5 inches of the wall bearing, and every step broke at the end of the plate.

Architects should be very careful in the selection of the material for the staircases of public buildings; and people generally should be very careful in meddling with them when once up.

It is a singular fact, that in the latter instance no person was on the staircase when it fell, though some few weeks previously it had been loaded to its utmost capacity.

RICHARD R. BRASH.

SIR,—The late deplorable event that occurred at the Polytechnic Institution will, it is to be hoped, lead to the construction of geometrical stone stairs on a more sound and scientific method than the defective one now in general use, where no provision whatever is made against the great lever power exerted on steps and landings, at or near to the wall-hold, particularly when they project a great distance, and a multitude of people are travelling either upwards or downwards on them, but particularly downwards. To make the whole area of steps and landings, composing a stone stair, of equal strength throughout, it is quite requisite that every stone should be at least 1 inch thicker or deeper at the wall-hold for every foot it projects from the face of the wall than what it is at the nosing at the well-hold. This is done by having the rebate of the steps of an extra depth down to the soffit, as no difference will take place so far as the height of the breast of the step is concerned. The wall-hold of both steps and landings should not be less than equal to one-seventh part of the projection from wall to nosing of well-hole.

Stairs constructed on this principle depend very little indeed on any joggle or other support, except the walls they are fixed into, which ought to be good in every respect, and fully competent to bear with safety much more weight than if the whole of the stairs were crowded with a multitude of people.

A. PATERSON.

SIR,—It is but little use regretting after mischief is done, but if past mischief can be made to prevent it in future, some good is the result. There are many stone staircases in London besides the Polytechnic. Have you ever been at the London Tavern, for example, at some crowded meeting, in the large room at the top of the house? I have; and often have I felt not only that the staircase and balusters ought to be well put together to bear the pressing and squeezing, but also that the room had need be sustained by very solid walls to bear the tremendous weight on occasions when the room is crowded, and perhaps stamping with excitement on some special occasion.

OBSERVER.

DECISIONS UNDER METROPOLITAN BUILDING ACT.

Thinning Walls. — The district surveyor for South Kensington, summoned Mr. Carr, builder, of 24, Montagu-street, Portman-square, before the magistrate at the police office, Hammersmith, for cutting away a half brick in the thickness from the face of the external wall of a new house now completing, for the purpose of widening the kitchen stairs. Mr. Carr did not appear; but the magistrate, upon hearing the case on Thursday, the 1st instant, directed an order to issue for the builder to make good the wall in cement to the satisfaction of the district surveyor.

Exempted Buildings.—At Wandsworth Police Court, Mr. George Blackburn, builder, Limehouse, appeared before Mr. Ingham to answer a summons for not giving to Mr. Hiscocks, the district surveyor of Wandsworth and Tooting, two days' notice of his intention to erect two buildings. Mr. Hiscocks stated that the buildings in question had been erected at Tooting-common. One was a wooden structure placed against some stables, and the other was an addition to the dwelling-house, all in one occupation. No notice had been given of the intended erections, and he now sued the and even the books published for their guidance contained a diagram which was in accordance with their practice. Mr. Ingham said he could not look at the diagram. It was not part of the Act of Parliament, and, therefore, was not an authority. Mr. Hiscocks said the question had been decided by other magistrates, and they coincided with his construction of the Act. Mr. Taylor, senior, said defendant for that irregularity. Mr. Taylor, architect, appeared for the defendant, and claimed exemption from the notice under the 6th section of the Act. He proved that the new buildings were not 30 feet in height, and were also more than "30 feet from the nearest buildings and from the ground of any adjoining owner." Mr. Hiscocks contended that the words "nearest buildings," meant any buildings, and not merely those of an adjoining owner. Mr. Taylor said it had always been held that the Act referred to another owner's building only; and he had his father, who was the district surveyor of Battersea, Lambeth, and Newington, present, to show that he construed the Act in that way. Mr. Ingham said he must be guided by the Act of Parliament, and he inclined to Mr. Hiscock's opinion. The words were "at least 30 feet from the nearest buildings and from the ground of an adjoining owner." These were two distinct things, and not at all connected. Mr. Taylor said district surveyors did not construe the Act in that sense,* he had had a great deal of practice, and he had always believed the Act to mean the buildings and grounds of an adjoining owner alone. Mr. Ingham said if it was intended to be construed in that way, the Legislature had not so expressed it. If the word "from" had been omitted, then he should have agreed in that opinion. However, he would adjourn the summons for a fortnight, to allow both sides to get up their arguments, before he gave any decision upon the case.

* Is Mr. Taylor right in saying this? Bungling as the Act is, its intention in the present case coincides with common sense, and seems sufficiently clear.

Books Received.

The Progress of Domestic Architecture. From Philp's *History of Progress in Great Britain.* London: Houlston and Wright.

IN this pamphlet, which, complete in itself, forms the architectural section of Mr. Philp's larger work, the writer has brought together so much interesting matter from numerous sources, including our own pages, and illustrated it with so many cuts, that at first sight it has the aspect of an exceedingly good shilling's-worth, on an exceedingly good subject. Looking at it more closely, however, by the light of knowledge, its value is seen to be greatly marred by the want of proper chronological arrangement and the marking of characteristics, so that, we should fear, a lay reader would get from it no precise notion of what changes took place, or of the means, consequently, of identifying the works of different periods. Thus, at the commencement of the first chapter, when describing Anglo-Saxon houses, the external staircase at Canterbury, which every one knows to be Norman, and that of an Early English building, are given as illustrations, and there is a constant running past of the subject, so that we get to houses of Henry VIII.'s time before we have done with those of the earlier period, and have to go back. Nevertheless, it forms an interesting and readable production, and in its proper place, in Mr. Philp's history, would be less amenable to criticism than it is in its present form, and under the title of "The Progress of Domestic Architecture."

Original Unpublished Papers, illustrative of the Life of Sir Peter Paul Rubens, as an Artist and a Diplomatist. Preserved in H.M.'s State Paper Office. With an Appendix of Documents, &c. Collected and edited by W. NOEL SAINSBURY, of H.M.'s State Paper Office. London: Bradbury and Evans. 1859.

THE public are much indebted to Mr. Sainsbury for turning the State Paper Office to such good account as this volume proves him to have done, although not for the first time, as our own columns have occasionally shown.

The great Flemish artist and diplomatist appears upon the scene, in Mr. Sainsbury's goodly volume, about the year 1616, in a hunting-piece, as we might say. This hunting-piece, painted by Rubens, Sir Dudley Carleton,—our ambassador at the Hague, a great lover of the arts, and one of the chief means of exciting a love for art-works in England, then extending,—greatly desired to possess. He offered to exchange for it a chain of diamonds belonging to his wife. Rubens, however, having set a price upon his picture, and having ascertained the value of the diamonds to be considerably less than his price, declined the offer, and the picture was ultimately sold to the Prince of Bavaria, and is now in the Royal collection at Munich. It was "18 foot long, and between 11 and 12 foot high;" and the unalterable price for it was 100*l.* sterling. Had the transaction been one of the present time, doubtless Rubens, the "prince of painters," would have added a cipher to the right of the sum demanded, and altered the shape of the first figure. Carleton, whose wife's chain had been valued at 44*l.* afterwards got a duplicate of the desired picture for it, but on a smaller scale, namely, 11 feet by 8. Rubens had a high estimation of the importance of size in a picture, and he speaks of having "never wanted courage to undertake any design, however vast in size, or diversified in subject." He had, he thought, "a natural instinct, better fitted to execute works of the largest size rather than little curiosities." Every one, according to his gifts, he adds. These little transactions established an acquaintanceship which ultimately led, it may be said, at least indirectly, to the sojourn of Rubens in England, and the conversion of the painter into an English diplomatist and an English knight, with the British lion rampant on his Flemish coat of arms.

The next art-transaction with Englishmen after those with Carleton, which included an exchange of

pictures, "the very flower" of Rubens's stock, as he described them, for marbles and other antiques belonging to Carleton, was the purchase of another hunting-piece (only partially done by Rubens) for the Prince of Wales, afterwards Charles I. The prince, however, refused a place to it in his gallery, and Rubens, though somewhat mortified, agreed to "paint another hunting-piece less terrible than the 'lions,'" and entirely by his own hand.

In 1629 Rubens received the commission to paint the decorations of the new Banqueting-hall at Whitehall; but before that he had been employed at the Luxembourg, in Paris, by the French royal family, and there he had become acquainted with that magnificent "gossip" of old "dad," Jamie I.,—the Duke of Buckingham,—a portrait of whom he had painted, and with whom he had trafficked, as to his collection of antiques, pictures, gems, &c. which he agreed to dispose of to Buckingham for 100,000 florins and casts of the chief of the statues, busts, and bas-reliefs. Most of this collection, if not the whole, Mr. Sainsbury thinks, were actually sent to England, but were returned to Antwerp for sale previous to the Buckingham sequestration in 1649.

It was through these acquaintanceships with Carleton and Buckingham mainly that Rubens became a diplomatist in the Spanish misunderstandings with England; but into these subjects we need not enter. It may be remarked, however, as a curious coincidence, that while Rubens negotiated on the part of Spain, the fitting agent whom Buckingham selected on the part of England was also a painter, namely, Balthazar Gerbier. Artists must have stood pretty high in the esteem of monarchs and their ministers in those days.

It was not as a painter, and to execute the Whitehall commission, that Rubens came to England in 1629, but as a political envoy. His stay in England, strange to say, is precisely that period concerning which the State-Paper Office has least to say. He only remained here for about ten months: nevertheless he painted many pictures while here, and among them the "Peace and War—an Allegory," now in the National Gallery, and which he made a present of to the King. The Whitehall pictures were not amongst those done in England: he executed these on his return to Antwerp. It was on the eve of his return that Charles, who had paid him distinguished attention, conferred on him the honour of knighthood. To the scandal of the English monarch, however, the money was not forthcoming for the Whitehall pictures when they were finished, and Rubens, instead of forwarding them direct, rolled them up and laid them aside till paid for. Thirteen months afterwards they were forwarded, having been partly paid for; but the balance was not paid till 1637, or two years afterwards. The whole sum was only 3,000*l.*

In 1640 Rubens was in treaty with Gerbier, on the part of the Royal family, for the painting of the ceiling of the Queen's cabinet at Greenwich, and some letters addressed to "Mr. Surveyor Inigo Jones, esq. surveyor-general of his Majᵗ. Workes," from Gerbier, appear in the correspondence; but the great painter's death, "off a deflaction wᶜʰ fell on his heart, after some dayes indisposition of ague and goutte," put an end to the negotiation.

The person of Rubens is described to have been "of just proportions; his height about five feet nine and a half inches; his face oval, with regular and finely-formed features, dark hazel eyes, a clear and ruddy complexion, contrasted by curling hair of an auburn colour, with moustache and beard: his carriage was easy and noble; his introduction and manners exceedingly graceful and attractive; his conversation facile and engaging; and when animated in discourse, his eloquence, delivered with full and clear intonation of voice, was at all times powerful and persuasive." He was well versed in Latin, Italian, French, and Dutch, and wrote in all these languages with equal fluency. Mr. Sainsbury gives translations, however, of his letters.

Miscellanea.

BIRMINGHAM ART-UNION.—The annual meeting and ballot for prizes was held at the Society of Artists' Rooms on Thursday last, the Mayor, Sir John Ratcliff, presiding. The report, read by Mr. B. A. Hallam, one of the honorary secretaries, stated that the receipts were considerably larger than was the case last year, the subscriptions having amounted to 342*l.* of which sum 310*l.* after paying expenses, were available for the ballot.

CARTERS' STRIKE AT PERTH AND GLASGOW.—The carters, says the *Perth Journal*, have issued posters throughout the town, calling upon the brotherhood not to yoke a cart until their employers agree that the working hours shall only be from 6 a.m. to 6 p.m. and on Saturdays to unyoke at 4 p.m. The proposal is reasonable. The strike is not confined to Perth. The bills intimate that it extends to Glasgow.

FATAL ACCIDENT BY THE FALL OF A WALL.—An inquest was taken on Saturday morning, at the London Hospital, by Mr. W. Baker, on the body of James M'Carthy, aged 40, a bricklayer's labourer. The deceased was engaged, a few days before, in filling up a hole in front of a newly-erected wall, near the Triangle, Hackney, when the whole mass of brickwork suddenly gave way and fell upon the deceased, who was severely injured internally. He was removed to the hospital, where he died on Friday. Verdict—Accidental death.

WILLENHALL.—The members of the reading and literary society of this town are making efforts to awaken from that lethargy in which the bulk of the inhabitants have long indulged. With all who have not determined to remain in their blissful state, the late exhibition of fine arts, manufactures, &c. which originated with the members of the Literary Institute, has left a visible impression behind: already the want of a proper building for lectures, &c. is keenly felt; and the surplus which will remain in the hands of the Exhibition Committee, after paying all expenses, will be devoted as the beginning of a fund wherewith to raise a suitable building for the purposes of a library, reading-room, lecture-room, class-rooms, &c. The total sum realized through the exhibition during the four weeks which it remained open is about 370*l.* the expenses about 220*l.* leaving a balance in favour of the proposed building of about 150*l.*

PIGS AND SCARLET FEVER IN BATTERSEA.—At present, in a district of Battersea where multitudes of swine are kept, and the air is offensively contaminated with their ordure, there is an alarming mortality from scarlet fever. The district is over a quarter of a mile in extent, and in little more than a month there have been twenty deaths from fever, and nine from other causes: the total number of deaths in the whole parish in little more than two months has been 247—an alarmingly large mortality. The Wandsworth Board of Works have, therefore, felt it to be full time to abate the abominable pig nuisance, and have been summoning the pig-keepers, and obtaining orders from the magistrate, Mr. Ingham, to remove their swine in the course of the month. The Board, it seems, intend to root out the nuisance, by taking out summonses in every instance of which they can obtain information, and it is a duty in the inhabitants to assist the Board in this respect as far as they can. Dr. Connor, the Medical Officer of Health for Battersea, gave evidence in some of the cases, and appears to have no doubt of the connection of the pig nuisance with the scarlet fever now raging.

THE DRINKING FOUNTAIN MOVEMENT.—At Brighton a meeting has been held at the Town-hall, Mr. Councillor Brigden in the chair, when resolutions were passed appointing a committee to obtain subscriptions and adopt other means towards securing the erection of one or more fountains in this borough. By another resolution the meeting expressed its desire to secure the co-operation of the Town Council.——A member of the Bristol Town Council (Mr. R. Lang) has offered to give 100*l.* towards the erection of a drinking-fountain opposite the Fine Arts Academy, near the Victoria Rooms, Queen's-road, Bristol. The Council received the offer with loud cheers.——The surveyor of the Cardiff Board of Health has reported on the most eligible sites and situations for public fonntains. Seven sites are specified as the most useful for foot-passengers.——The example of other towns has not been overlooked at Warrington. The mayor, and his brother, Alderman Peter Rylands, and Alderman Chrimes, in addition to an anonymous gentleman, have promised to pay for a fountain each. A meeting of working men is also about to be held to consider the question of public fountains and ragged schools, and it is believed they will erect a couple of fountains by their own exertions. The anonymous gentleman offers to erect either one granite fountain, or two of cast iron, the water of course to be provided. ——At Manchester, Mr. R. Barnes offered to erect any reasonable number of fountains, but the Corporation has not yet accepted the offer. There are three in the town, but one is without any drinking-cup, although it has "an old saucepan without a bottom," chained to it.

THE PROPOSED PAUPER LUNATIC ASYLUM FOR THE CITY.—On Saturday afternoon a meeting of the Committee of Justices was held at the Guildhall for the purpose of considering the basis or standard for a county-rate for erecting a pauper lunatic asylum for the City of London. Mr. Alderman Wilson presided. After some discussion, a basis or standard was agreed to, and later in the day was presented to the Court of Quarter Sessions, and was ordered to be considered on the 25th instant.

CHEDDAR.—A Literary and Scientific Institution, just erected, was opened at Cheddar on the 30th ult. by a *soirée* and public meeting. This project has been principally promoted by Mr. W. P. Budgett, of the firm of Messrs. W. P. and H. Budgett, for the improvement of the young men of Cheddar. The building has on the ground floor an entrance-hall, a reading-room, 14 feet by 20 feet, three rooms for the housekeeper, &c.; and on the upper floor a lecture-hall, to accommodate, with the committee-room adjoining, about 280 persons. The cost has been about 320*l.* The architects are Messrs. Cook and Hancorn, of Bristol; the builder, Mr. Grant, also of Bristol.

THE MAIN DRAINAGE OF THE METROPOLIS.—The Directors of the Bank of England have made an offer to the Metropolitan Board of Works of the loan of the 3,000,000*l.* which will be required for the execution of the works of the main drainage of the metropolis. The terms are not so favourable as were anticipated, from the state of the money-market, and the proposal has been transmitted to the Lords of the Treasury, for their consideration. The result of the inquiries respecting the competency of Mr. Moxon, who gave in the lowest tender for executing the works of the Northern High-Level Sewer, being of a favourable nature, and the three gentlemen proposed by him as his sureties having been ascertained to be most responsible persons, his tender has been finally accepted, and he only awaits the order of the engineer to commence the work, which will be given as soon as the financial arrangements of the Board are completed. The Board have engaged the professional services of Messrs. Haslam and Buckland, with reference to the houses and lands requisite for the construction of the pumping station at Deptford Creek, on the south of the Thames.

RAILWAY MATTERS.—The traffic returns of railways in the United Kingdom for the week ending January 1, amounted to 425,710*l.*; and for the corresponding week of 1857-8 to 397,080*l.* showing increase of 28,630*l.* The gross receipts of the eight railways having their termini in the metropolis amounted to 173,483*l.*; and in 1857-8 to 167,438*l.* showing an increase of 6,045*l.* The increase on the Eastern Counties amounted to 367*l.*; on the North-Western to 5,848*l.*; on the Blackwall to 114*l.*; on the Brighton to 9*l.*; on the South-Western to 306*l.*; and on the South-Eastern to 314*l.*: together, 6,958*l.* But from this must be deducted 889*l.* decrease on the Great Northern, and 24*l.* on the Great Western. The receipts on the other lines amounted to 252,227*l.*; and last year to 229,642*l.* showing an increase of 22,585*l.* The railway receipts for the past year show a diminution of 408,700*l.* or a little more than 1¾ per cent. although there was an increased mileage of 326 miles. This is the first time such an event has occurred. The falling off, however, was confined to the first nine months, the concluding quarter having shown an increase of 113,994*l.* but for which the total reduction would have been 522,694*l.*——The first stone of a viaduct on the Lune Valley Railway, at Low Gill, to be called the Dillicar Viaduct, has just been laid. The engineer is Mr. J. E. Errington. The viaduct will consist of eleven arches of 45 feet span, more than 100 feet in height, and containing upwards of 400,000 cubic feet of masonry. The contractor is Mr. Buxton.——It is proposed to form a railway in the Isle of Wight. The projected line, on the completion of Stokes Bay Ferry, will complete the communication between the metropolis and Ryde, Newport, Cowes, Ventnor, and Bonchurch. The railway, as laid down by Messrs. Birkinshaw and Conybeare, is to commence close to the pier at Ryde, and thence proceed to Rowlands, where it will diverge to the right to Newport, and thence, touching at Parkhurst and Northwood, to Cowes and to the left, proceeding coastward to Sandown by Gatton to Bonchurch and Ventnor.——The intersection of Western India by railways is rapidly progressing. About 150 miles are now constructed, and a large portion of the whole 1,128 miles laid down is now in progress. Workpeople abound, and in 1856-7 there were 46,000 employed on the railway works in the Bombay presidency, and in 1857-8 no less than 70,000.

THE GLASS-TRADE DISPUTES.—The Workmen's Society insist, it appears, on fixing the number of apprentices, and compelling the men to strike if that number be exceeded. The present dispute originated in a question as to an apprentice, on which the society placed six houses on strike. The masters generally, throughout the kingdom, are taking part in the counter-movement, and have locked out their hands, resolved to break up the dictating society. A correspondence between certain representatives of the opposing forces has taken place at Birmingham, but as yet it has led to no good understanding.

GLASGOW ARCHÆOLOGICAL SOCIETY. — The third meeting of the Glasgow Archæological Society, for this session, has been held in the Religious Institution Rooms, Glasgow. Dr. Stewart, of Kirkintilloch, exhibited an ancient chair, which belonged to the celebrated George Buchanan, and which he had obtained from a lineal descendant of the father of George. Dr. Stewart presented the chair to the society, for the purpose of being placed in their museum. The relic is an old-fashioned, low-bottomed oak arm-chair, the back being one solid piece of oak, elaborately carved. Mr. A. Galloway read a paper "On the Origin and Meaning of some Names of Places in Scotland, and particularly in Clydesdale."

ARCHITECTS' AND ENGINEERS' DRAWING SCHOOL. — Mr. Thomas J. Hill, of Old-street, City-road, who succeeded to the late Christopher Davy's classes, has been exhibiting about 800 drawings made by his pupils, embracing carpentry and the practical details of construction, in addition to elevations, perspectives, interiors, and examples of ornamentation. In the mechanical portion a very creditable proficiency was exhibited by several of the younger pupils. In the architectural department the best specimens were shown by H. Timewell, C. Sweeting, W. Pratten, J. Moreland, W. Davy, and others. For beginners it would seem to be a very useful establishment.

NORTHERN ARCHITECTURAL ASSOCIATION. — The first annual meeting of the Northern Architectural Association was held on Tuesday, the 4th, when the objects, constitution, and rules of the society were decided upon. The objects of the association are to promote union amongst its members, the elevation of the profession of architecture, the establishment of a uniformity of practice, and the general advancement of the art and science of architecture. It consists of three classes, viz. members, associates, and hon. members. The inaugural address will be delivered by Mr. Dobson, at the next quarterly meeting.

GLASS PAPER IN HINDOSTAN.—It may be interesting to some of your readers to learn how the natives of Hindostan manufacture their glass paper. They first get some broken beer or wine bottles, pound the pieces up very fine, then procure some paper (old newspapers principally), cover it with a good coating of glue, and immediately cover it with the pounded glass: when dry it is fit for use. Good sharp sand would answer the purpose, could glass not easily be obtained. Cloth would undoubtedly wear better; but I have seen the above clean off work fit to take any polish.—W. T.—*Buxar, East Indies.*

ART-EXHIBITIONS.—The exhibition of the Society of Female Artists, to be opened for the second season next month, will be held in the gallery next the Haymarket Theatre.——The French Government has published a notification that an Exhibition of the Works of Living Artists will take place in Paris on the 15th of April next, and be continued to the 15th of June. As on previous occasions foreigners as well as natives are to be allowed to exhibit.— —The love of the fine arts is spreading widely, and a fine-arts exhibition has been opened at Cape Town. The collection of oil paintings, prints, and photographs is said to be very creditable.

SCENERY AT DRURY LANE. — The pantomime here, "Robin Hood," is as usual very excellent and very amusing. Mr. E. T. Smith spares neither pains nor expense. The ballet-scene, the Abode of the Arcadian Fairies, as it is called, is a Dresden China sort of scene, silver trees, bearing golden leaves, with Watteau-like groups of shepherds at the foot of each, on both sides of the stage, and extending far back, the *vista* terminating with a bouncing cascade of live water. For the fair there is a characteristic scene of old gabled English houses, and the transformation scene is one of those marvellous combinations of mechanism and colour, groups of fair forms rising in all directions, and impossible foliage opening under the light of a polychrome sun, that have made the name of Beverley famous.

THE EXHIBITION OF 1861.—The council of the Society of Arts have addressed a letter to each member of the society, asking co-operation in setting the scheme afoot, and inviting suggestions and observations. As to the body by whom the Exhibition will be conducted, nothing can be known until after the next meeting of the Commissioners of 1851 Exhibition, who will not meet before the end of this month.

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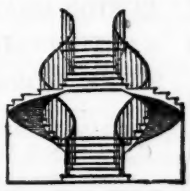

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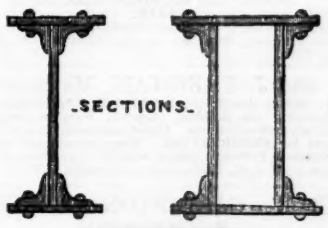

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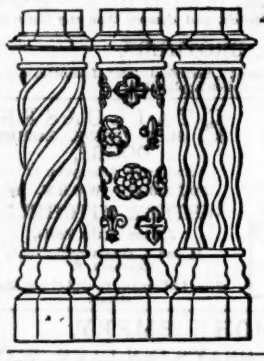

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